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**TECHNICAL MEMORANDUM  
SEPTEMBER 1997 GROUNDWATER SAMPLING  
RESULTS REPORT  
AND GROUNDWATER MONITORING PLAN  
(Revised July 21, 1998)**

**AMERICAN CHEMICAL SERVICE, INC.  
NPL SITE  
GRIFFITH, INDIANA**

**Montgomery Watson File No. 1252042**

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**Prepared For:**

**ACS RD/RA Executive Committee**

**Prepared By:**

**Montgomery Watson  
2100 Corporate Drive  
Addison, Illinois 60101**

**July 1998**



**MONTGOMERY WATSON**

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## EXECUTIVE SUMMARY

This Technical Memorandum presents the results of the fourth quarter baseline groundwater sampling event for the American Chemical Service (ACS) NPL Site (Site) in Griffith, Indiana. It also provides a summary of the baseline sampling data in the context of previous sampling results and it includes a proposal for an interim groundwater monitoring plan (during remedial design and remedial action) on the basis of the accumulated data and future requirements.

The fourth sampling event for the baseline groundwater monitoring was initiated on September 22, 1997 with the measurement of water levels at staff gauges, piezometers, and monitoring wells on the ACS Site. During the next two weeks, groundwater samples were collected from 24 upper aquifer and 23 lower aquifer monitoring wells and submitted under standard chain-of-custody for laboratory analyses of the full scan Target Compound List (TCL) organic and Target Analyte List (TAL) parameters. The detected analytes and concentrations were generally consistent with previous sampling results. On October 2, 1997, groundwater samples were collected from five residential wells in the vicinity and submitted for laboratory analysis of TCL/TAL parameters.

Groundwater contour maps were developed for the upper and lower aquifers based on the September 1997 water level data. The interpreted groundwater flow patterns are consistent with flow patterns observed at the Site since the Remedial Investigation in 1991. Historically, the water table has been higher to the east of the ACS facility and lower to the west and south. Prior to construction of the barrier wall, there was a groundwater mound beneath the ACS Site, resulting from infiltration through the unvegetated surface of the ACS facility and from the ACS fire pond. The resulting mound created a hydraulic barrier that prevented east-to-west groundwater flow beneath the Site, and caused the groundwater to flow north and south from a divide just east of Colfax Avenue; northward flow was directed around the ACS facility and southward flow was toward an area southeast of the Site with lower water table levels.

There has been little change in the regional groundwater flow following completion of the barrier wall and perimeter groundwater containment system (PGCS) at the ACS Site. These two remedial projects, completed in June and July 1997, only resulted in small localized changes in groundwater direction and velocity in the upper aquifer, mostly related to the 1500 foot groundwater extraction trench that is integral to the PGCS. The water table map developed from the September 1997 water level data shows that groundwater flow is still from east to west, with flow being diverted north around the ACS facility and to the south. The hydraulic barrier formerly caused by surface water infiltration on the ACS Site, has been replaced by the barrier wall. There is no observable change in the groundwater flow pattern in the lower aquifer resulting from the remedial construction. The lower aquifer potentiometric map developed from the September 1997 water level data indicates that, just as in the past, groundwater flow is from south to north in the lower sand aquifer beneath the ACS NPL Site.



Four primary areas of buried waste have been identified as sources of groundwater contamination at and around the Site: the On-Site Containment Area, the Still Bottoms Area, the Off-Site Containment Area, and the Kapica-Pazmey Drum Recycling Area. Previous sampling, beginning in 1989 for the Remedial Investigation, has indicated that groundwater contamination extends southeast from the Off-Site Containment Area and north and west from the ACS facility in the upper aquifer. Monitoring wells installed in 1996 have delineated the outer extent of groundwater impacts in each area. Benzene and chloroethane are the predominant groundwater contaminants. ~~Other constituents such as semi-volatile organic compounds, PCBs, pesticides, metals, and inorganic parameters are not found consistently, or at significant concentrations, in Site groundwater.~~

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The only observed lower aquifer impact has been related to monitoring well MW9, which was installed in 1990 just west of the ACS facility. Soon after installation, chloroethane was detected in MW9, and then in 1995, benzene was detected in a sample from the well. A dye tracer test conducted during 1997 indicated that there is a leak between the upper and lower aquifers at MW9, probably along the well casing. MW9 was abandoned in February 1998 and replaced by MW9R constructed ten feet north (downgradient) from the MW9 location. Future sampling of the replacement well will be used to evaluate the effectiveness of the abandonment and the magnitude of the residual impact from the leakage. Ether, a volatile organic TIC (tentatively identified compound), has been detected in several lower aquifer wells located northwest of the ACS facility. Ether has been detected at a concentration of 12,000 ug/L at monitoring well MW51.

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Residential wells were sampled during the remedial investigation and during 1996 and 1997. In some sampling events there were occasional traces of VOCs reported in several samples, upgradient from the Site and to the far east of the Site. None of the detections exceeded levels of concern, such as MCLs.

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Construction of the PGCS and the barrier wall has isolated the primary sources of groundwater contamination. Groundwater monitoring of the upper and lower aquifers will be required at and around the Site. Section 4 of this Technical Memorandum details an Interim Monitoring Plan to be conducted during the next few years during remedial design and construction. The monitoring plan addresses: 1) sampling locations, 2) sampling parameters, 3) sampling frequency and 4), a protocol to modify the sampling or take other action, if necessary.

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The upper aquifer network of monitoring wells will monitor groundwater quality in three areas of groundwater contamination identified in the upper aquifer: one to the north, one to the west, and the other to the southeast of the ACS NPL Site. Perimeter and internal monitoring wells have been defined for each of these areas. ~~The perimeter wells for each area are near the margins of groundwater impact. Future monitoring at these locations will allow the boundaries of groundwater impacts to be closely monitored, confirm if the groundwater contamination is remaining contained, and provide early warning if it may be expanding.~~ Internal wells have been identified in the north and southeast areas. Results of periodic samples from these wells will provide an indication of the performance of the

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PGCS and barrier wall, show changes in groundwater quality over time, and provide a warning if groundwater impacts are becoming more significant.

The lower aquifer monitoring network wells will be used to: 1) document background groundwater quality, 2) monitor the behavior of the area of contamination associated with groundwater leakage between the upper and lower aquifer at MW9, and 3), monitor the point of compliance at the downgradient boundary (north side) of the Site.

Groundwater monitoring will be conducted on a semi-annual basis ~~during the next few years~~, as remedial design and remedial action proceed. The upper and lower aquifer network will be sampled and analyzed for full scan TCL/TAL each spring. The second annual sampling event will be conducted each fall, with the samples analyzed for ~~representative~~ indicator parameters: PCE, TCE, TCA, DCE, 1,2-DCA, VC, chloroethane, benzene phenol, phthalates, arsenic, and lead. Because of recent fluctuations in the concentrations of VOCs at upper aquifer wells MW48 and MW49 and because MW9R is a new well, these will be sampled on a quarterly basis and analyzed for indicator parameters. In addition, the water levels will be measured at the level monitoring network locations, analyzed, and reported on a quarterly basis. 12

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## 1.0 INTRODUCTION

This Technical Memorandum provides a summary of the Baseline Groundwater sampling conducted at the American Chemical Service (ACS) NPL Site (Site) in Griffith, Indiana during 1996 and 1997. The baseline sampling consisted of four consecutive quarterly sampling rounds of groundwater monitoring at approximately 48 monitoring wells. These rounds included samples collected at the monitoring network wells in: 1) March, August, and November 1996, 2) April and March 1997, 3) June 1997, and 4) September 1997. The monitoring included: the measurement of water levels at monitoring wells, piezometers and staff gauges; the measurement of field parameters, and the collection and submittal of water samples for analysis of Target Compound List (TCL) organic and Target Analyte List (TAL) inorganic parameters.

The remainder of this Technical Memorandum includes three sections: Section 2 provides a listing of the September 1997 sampling event, Section 3 presents a summary and evaluation of the four quarterly events of Baseline Sampling, and Section 4 presents a proposed interimlong-term groundwater monitoring plan to be in effect during the remediation remedial design and remedial action phases at the Sitebased on the Baseline Sampling results. In addition, many of the monitoring wells were sampled four or five times prior the baseline sampling, including sampling during and following the remedial investigation.

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## 2.0 SEPTEMBER 1997 SAMPLING

### 2.1 PURPOSE AND SCOPE

The fourth round of the Baseline Groundwater Sampling Program, conducted in September 1997, consisted of measuring water levels and collecting groundwater samples.

- Water levels were measured at staff gauges and upper and lower aquifer wells and piezometers on September 22, 1997.
- Groundwater samples were collected from 24 monitoring wells screened in the upper aquifer and 23 monitoring wells screened in the lower aquifer during the weeks of September 22, 1997 and September 29, 1997 and analyzed for TCL/TAL parameters.

In addition, and at the request of U.S. EPA, water samples were collected at five nearby residences and analyzed for full scan TCL/TAL parameters.

As defined in the October 1996 Phase 2 Upper Aquifer Technical Memorandum (revised June 1997), the objectives of monitoring the upper aquifer are to:

- Monitor groundwater quality at the boundaries of the known extent of contamination to determine whether the contaminant plume in the upper aquifer is stable or expanding.
- Measure water levels in the upper aquifer to determine how remedial actions affect groundwater flow patterns at the Site.
- Monitor groundwater quality in the plume interior to determine how contaminant concentrations change in response to remedial actions.

The objectives of monitoring of the lower aquifer (listed in the September 1996 Lower Aquifer Investigation Report (revised June 1997), are to:

- Verify the historic northerly horizontal groundwater gradient;
- Monitor the effect, ~~if any, of remedial actions~~ the remedial actions consisting of the barrier wall, the northside perimeter groundwater containment system and other remedial actions at and around the Site, on groundwater flow patterns; and
- Monitor for the presence of contaminants, if any, that may migrate from the upper aquifer to the lower aquifer.

Monitoring well locations and sampling parameters for the September 1997 upper aquifer monitoring activities are described in the Phase II Upper Aquifer Investigation Technical Memorandum, revised June 1997. Well locations and sampling parameters for the September 1997 lower aquifer monitoring activities are described in the Lower Aquifer Investigation Report Technical Memorandum, revised June 1997.

As in previous sampling events, the September sampling was conducted in accordance with U.S. EPA-approved Specific Operating Procedures (SOPs), and the approved Quality Assurance Project Plan (QAPP).

## **2.2 WATER LEVELS**

Water levels were measured at the monitoring wells, piezometers, and staff gauges on September 22, 1997. Three additional sets of paired piezometers (P101-P106) were installed on September 25, 1997. These piezometer pairs were installed to complete the level monitoring system for the barrier wall built around the waste areas at the Site during 1997. In addition, piezometers P1, P20, P40, P41, and P49, which were damaged during barrier wall construction, were replaced. The new piezometers were surveyed, but because they were installed after the September 22, 1997 gauging event, these piezometers are not included in the tables and figures accompanying this Technical Memorandum.

### **2.2.1 Plots of Water Table and Lower Aquifer Potentiometric Surface**

Water level measurements are presented in Table 1, which also includes map coordinates (reference points), top of inside the well casing elevations, and calculated groundwater elevations for the measurement points. Figure 1 is a water table contour map prepared from the calculated groundwater elevations (plotted adjacent to the well, piezometer, and staff gauge symbol). Figure 2 is a water table contour plot for November 1996 before the barrier wall and perimeter groundwater containment system were constructed. Figure 3 shows the potentiometric surface for the lower aquifer based on the groundwater elevations at the uppermost well at each lower aquifer well nest (calculated groundwater elevations are plotted adjacent to well and piezometer symbols).

### **2.2.2 Vertical Gradients Calculated for the Upper and Lower Aquifers**

Vertical gradients were calculated for both the upper and lower aquifers on the basis of water level measurement data from adjacent wells and piezometers screened at different depths in each aquifer.

A summary of vertical hydraulic gradients calculated for nested piezometers in the wetland area is presented in Table 2. Vertical gradients were calculated by dividing the difference in head between nested piezometers by the distance between the screen midpoints. Piezometers screened at the base of the upper aquifer have screens that are two feet long. Piezometers placed to measure the water table are constructed with ten-foot long screens placed to intersect the water table. Therefore, the distance between screen midpoints is an accurate representation of the screen separation, and is appropriate for making the vertical

gradient calculation). Vertical gradients in the wetland area appear to be upward, but low in magnitude.

Vertical gradients calculated for nested wells screened within the lower aquifer during the September 1997 water level monitoring event are presented in Table 3. The gradients were calculated by dividing the difference in head between nested wells by the distance between the bottom of the upper screen and the top of the lower screen at each well location. These reference points were selected rather than screen centers in order to provide the most accurate vertical gradient calculations. Most of the lower aquifer wells have ten foot long screens, the differences in water levels at adjacent lower aquifer wells are generally quite small (most less than 0.02 feet), and the vertical separation between screens is 20 feet or less in most cases. In order to avoid biasing the calculated gradients low, it was appropriate to use the bottom and top of adjacent well screens rather than screen centers.

Four of the gradients calculated between upper, middle, and lower zones were downward, two were upward, and four were within the margin of potential error in the water level measurements. The largest downward gradient was calculated for MW8/MW31, where a difference of one foot was recorded between MW8 and MW31. This is clearly a measurement error at MW8, since previously, MW8 and MW31 have shown water elevations that are within several hundredths of a foot of each other. The error was not discovered until the actual groundwater elevations were calculated from the water depth measurements. Since the calculation was made several days after measurement, it was too late to collect another contemporaneous, accurate measurement. The largest upward gradient was observed at the MW29/MW34/MW9 well nest, where an upward gradient of 0.0013 was calculated between wells MW29 and MW34. Where gradients are measurable, there seems to be a general downward gradient from the upper to the middle part of the lower aquifer and an upward gradient from the bottom to the middle of the lower aquifer. As a result, there is little overall gradient between the top and bottom of the lower aquifer.

### 2.2.3 Calculated Vertical Gradients Between the Upper and Lower Aquifers

Calculated vertical gradients between wells screened in the upper aquifer and lower aquifer are presented in Table 4. In general head levels are more than ten feet higher in the upper aquifer than in the lower aquifer. It is clear that the water level drop occurs across the clay layer between the upper and lower aquifer rather than across the entire distance between well screens in the upper and lower aquifer. Therefore, vertical gradients were calculated by dividing the difference in head between the upper and lower aquifer wells by the thickness of the clay confining layer between the two wells. Strong downward vertical gradients ranged from -0.37 calculated between MW17 and MW28 to -0.82 between P27 and MW9.

## 2.3 GROUNDWATER SAMPLING

Prior to sampling, monitoring wells were purged using low-flow methods in accordance with the approved Monitoring Well Sampling SOP for the Upper Aquifer Investigation

(revision: March 21, 1997). Field parameters, pH, specific conductivity, temperature, and turbidity, were measured and recorded during well purging activities (Table 5).

### **2.3.1 Upper Aquifer Analytical Results**

Laboratory analytical reports for VOC, SVOC, PCB, and inorganic compound analyses of samples from upper aquifer monitoring wells are compiled in Appendix D. Compounds detected in samples are summarized in Table 6. The detections of primary contaminants of concern (as identified in previous sampling rounds) are summarized for each upper aquifer well on Figure 4. The results are consistent with previous sampling data and are discussed in the context of all four quarters of baseline sampling in Section 3. Appendix C contains time trend plots for benzene and chloroethane in upper wells and also a listing of all analytical detections in each upper aquifer well.

### **2.3.2 Lower Aquifer Analytical Results**

Laboratory analytical reports for VOC, SVOC, PCB, and inorganic compound analyses of samples from the lower aquifer monitoring wells are compiled in Appendix E. Compounds detected in samples are summarized in Table 7 for each lower aquifer well and shown on Figure 5. The results of the sampling are consistent with previous results and are discussed in the context of all four quarters of baseline sampling in Section 3. Appendix C contains time trend plots for benzene and chloroethane in lower wells and also a listing of all analytical detections in each lower aquifer well.

Monitoring Well MW9 is a lower aquifer monitoring well that has a history of groundwater contamination. The well was installed in March 1990 using a double casing method. Within six months, low levels of chloroethane were detected in samples collected from the well. Benzene was detected in a sample from the well in January 1995 and chloroethane and benzene have been detected at generally increasing concentrations in samples since that time. Although a review of the construction report for the well did not provide any indication of irregularities in the well construction, the sudden appearance and quick increase in concentrations seemed to suggest that the benzene and chloroethane were migrating down the well casing rather than coming from some other more diffuse or distant source.

Therefore, Montgomery Watson developed a tracer test procedure to evaluate whether or not groundwater was migrating from the upper to lower aquifer in the immediate vicinity of MW9. After U.S. EPA approved the procedure, the tracer test was conducted. Dye and ionic tracers were injected in the upper aquifer in the vicinity of MW9. After 60 days, the dye tracer was detected in groundwater taken from MW9, confirming that there is a leak between the upper and lower aquifers at this location, probably along the well casing. ~~U.S. EPA has approved a specific operating procedure to abandon MW9 and replace it with a new well (MW9R).~~ Following the U.S. EPA approved plan, MW9 was abandoned in February 1998 and replaced by MW9R, located approximately five to ten feet north (downgradient) from the original MW9 location. The results of future sampling of the new well and MW10C, which is downgradient, will be used to evaluate the effectiveness of the abandonment.

## 2.4 RESIDENTIAL WELL SAMPLING

Samples were collected at 18 residential wells in March 1997. The samples were analyzed for full scan TCL/TAL compounds. Trace levels of VOCs were detected in several of the wells, but none of the detections was above an MCL. Wells at the following five addresses were re-sampled concurrent with the September 1997 groundwater sampling event: These were the wells at the following addresses: 938 South Arbogast, 1014 South Arbogast, 1033 Reder Road, 1130 Reder Road (two houses served by the same well), and 430 East Avenue H. At the request of U.S. EPA, residential wells were sampled at the following addresses in the vicinity of the ACS NPL Site in October 1997.

The sample to be collected from 938 S. Arbogast was not collected because this address had previously been connected to the City of Griffith water and sewer utilities. Therefore, U.S. EPA instructed Montgomery Watson to collect a sample from 1002 Reder Rd. The sample designation assigned to this well in the field was ACS-PWY-02 and a duplicate of this sample was collected and designated ACS-PWY-92. Due to a laboratory error, the sample from ACS-PWY-02 was analyzed for multi-concentration VOCs, not the required low-level detection limits used for the private well samples. By the time the laboratory notified Montgomery Watson of this mistake, the sample was beyond the allowable holding time, and the laboratory could not re-extract the sample to run low-level detection limit VOCs. Therefore, the VOC and VOC TIC data sheets for ACS-PWY-02 are not available. However, because sample ACS-PWY92-02 was a duplicate of ACS-PWY-02, low-level detection limit VOCs and VOC TICs are available from 1002 Reder Rd., and are included in Appendix F.

Sample Identifier	Address
PWY-02	1002 Reder Road
PWD-02	1033 Reder Road
PWRC-02	1130 Reder Road (Center House)
PWRE-02	1130 Reder Road (East House)
PWK-02	1014 South Arbogast
PWZ-02	430 East Avenue H

The locations of the residential wells east and south of the Site are shown on Figure 6. Each residential well sample was analyzed for TCL and TAL parameters using low detection limit analytical methods. The sampling results are tabulated in Appendix F and the analytical detections are summarized in Table 8.

The September 1997 sampling results (the sampling date was actually October 2, 1997) were similar to the March 1997 sampling. In sample from residential well PWK, TCE was detected at 0.3 parts per billion in March and at 0.2 parts per billion in September. PWK is screened in the lower aquifer, upgradient (south of the Site) and outside the footprint of the upper aquifer impacted groundwater. The samples from PWRE and PWRC again showed trace levels of VOCs, as they did in the March sampling. However, in March the detected VOCs were 2-butanone detected at 3 parts per billion and vinyl chloride



detected at 0.3 and 0.2 parts per billion. In the samples collected in September, only one  
| VOC was detected: methylene chloride at 0.2 parts billion.

### **3.0 EVALUATION OF BASELINE SAMPLING DATA**

#### **3.1 SUMMARY OF AVAILABLE GROUNDWATER DATA**

The Remedial Investigation for the ACS NPL Site was initiated in 1988. Since that time 28 upper aquifer and 25 lower aquifer monitoring wells have been installed and sampled numerous times. In addition, more than 100 upper aquifer piezometers, three lower aquifer piezometers, and 12 surface water staff gauges have been installed and used to develop groundwater elevation maps on numerous occasions. Water levels and samples from these points have been used to complete a number of hydrogeologic evaluations starting with the Hydrogeologic Technical Memorandum and continuing with the Remedial Investigation Report and subsequent monitoring reports. The following evaluation of the groundwater flow system, aquifer geochemistry, and contaminant distributions is based on previous reports and the Baseline Groundwater monitoring conducted in 1996 and 1997.

#### **3.2 GROUNDWATER FLOW SYSTEM**

##### **3.2.1 Groundwater Flow in the Upper Aquifer**

Following the collection of water level information in June 1997, two remedial construction projects have been completed: the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall and Extraction System (BWES). The effect of these structures on the upper aquifer groundwater flow system is evident in comparing Figures 1 and 2. Figure 2 illustrates the water table configuration prior to construction and Figure 1 illustrates the water table configuration after construction. Comparison of the contour patterns on these two figures indicates that changes have occurred locally in the flow pattern, but that the general regional groundwater flow paths are unchanged.

The highest groundwater levels in the upper aquifer (other than inside the barrier wall) are located east of the ACS facility as indicated by MW18 and P60 (Figure 1). These high water levels suggest the presence of a groundwater mound approximately along Reder Road. Groundwater flows to the north and south from this mound. The lowest groundwater elevations are to the west and south of the ACS facility. To the west, the groundwater sinks are the drainage ditch between SG11, SG5, SG6 and SG3, and the Griffith Landfill leachate collection system (shown by SG2 and P22). The water table is also lower to the south at locations such as MW43 and MW44. In general, groundwater flow in the vicinity of the Site is from the groundwater mound along Reder road, toward the groundwater lows in the west and south. In addition, the collection trench for the PGCS is a groundwater sink to the northwest and west of the ACS facility, as shown by the water table depression between P82 and P91.

The barrier wall prevents groundwater flow directly to the west from Colfax Avenue. Groundwater flows both north and south from the Reder Road mound. The flow to the north curves around the north end of the barrier wall and is collected in the PGCS

extraction trench (P83) or discharged to the drainage ditch (just beyond MW48). Groundwater also flows south from the Reder Road mound toward the south/southwest.

The effect of the PGCS extraction system and effluent discharge is evident in the wetland to the west of the ACS facility. The 629 and 630 contour lines west of the ACS facility illustrate this effect. The 629 foot elevation contour line wraps around most of the PGCS extraction trench due to lower water levels at P91, P88, and P85. A few hundred feet further to the west, the 630 foot contour line outlines a local groundwater high caused by treated water discharges into the wetlands from the PGCS.

While the barrier wall now prevents groundwater flow west across Colfax Avenue, westerly flow across Colfax Avenue was previously limited by a hydraulic barrier. Figure 2 (the November 1996 water table plot) shows similar general groundwater flow from east of Colfax toward the groundwater lows at the drainage ditch, the landfill leachate collection system or the far south part of the Site. Prior to construction of the barrier wall, surface water infiltration to the water table on the ACS Site and through the ACS facility fire pond (shown by SG7) caused a groundwater high near the center of the Site, resulting in radial groundwater flow from the ACS Site, and a hydraulic barrier to westerly flow across Colfax Avenue.

The upper aquifer matrix is a homogeneous silty sand with no evidence of interlayering or bedding complexities. Since the water table maps are based on water levels collected at 12 staff gauges, 28 wells, and more than 100 piezometers, very little interpolation has been required to develop detailed contour plots. All water table maps developed for the ACS Site since the remedial investigation in 1991 have consistently shown the same general groundwater flow patterns. While the contour lines defining the water table are curved, they clearly show consistent groundwater flow pathways from recharge to discharge areas. The average calculated groundwater flow velocity in the upper aquifer is on the order of 50 feet per year, but the rate probably ranges from a minimum rate of less than 10 feet per year to greater than 200 feet per year. The only locations where the groundwater velocity may exceed 100 feet per year are in the vicinity of the PGCS extraction trench and the Griffith Landfill leachate collection system. (Detailed groundwater velocity calculations, based on the RI aquifer tests and the pumping test conducted in March 1995, are summarized in Appendix A.)

Because of the homogeneity of the upper aquifer, ~~and the relative simplicity of the groundwater flow paths,~~ the total number of staff gauges, wells, and piezometers can be reduced for future monitoring events. The level measurement locations necessary to develop accurate water table maps are presented in Section 4.2.1.

### 3.2.2 Vertical Gradients in the Upper Aquifer

Due to the presence of elevated levels of benzene at the base of the upper aquifer relative to that of the surface of the upper aquifer which was determined during the tracer investigation. U.S. EPA was concerned that there might be downward gradients in the upper aquifer in the wetland, and so required the installation of four sets of nested piezometers in the wetland to the west of the ACS facility. Table 2 shows the upper aquifer

vertical gradient calculations based on the September 1997 water level measurements. The vertical gradients recorded at each of the four nested piezometer locations for the past five quarters are tabulated below.

Piezometer Nest	August 1996	November 1996	March 1997	June 1997	September 1997
P64/P65	0.009	0.000	0.016	-0.062	0.022
P66/P67	0.005	0.005	-0.003	0.013	0.007
P68/P69	0.000	0.000	0.010	0.002	0.003
P70/P71	-0.020	0.006	0.030	0.042	0.035

Out of the 20 vertical gradients calculated from these four dual piezometer locations in the upper aquifer in the wetland, three were downward, three were zero, and 14 gradients were upward. From these accumulated data, it is apparent that the general vertical gradients are upward, which is the typical occurrence in a wetland area where groundwater discharges to the surface. ~~Therefore, it will not be necessary to continue collecting water levels at these piezometer pairs in future monitoring events.~~

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### 3.2.3 Groundwater Flow in the Lower Aquifer

Water levels were measured at staff gauges and the lower aquifer monitoring wells and piezometers on September 22, 1997. The measurements are recorded in Table 1 which also includes the map coordinates and the calculated water elevation for each measurement point. Figure 3 is a plot of the potentiometric surface for the lower aquifer based on the water levels measured at the uppermost well at each lower aquifer well nest. The calculated water elevations are plotted adjacent to the well, piezometer, or staff gauge symbol.

Consistent with the historical groundwater data, the groundwater flow in the lower aquifer is essentially northward. The horizontal hydraulic gradient in the lower aquifer was calculated using the measured difference in head between MW22, located in the southern portion of the Site, and MW10, located at the northern Site boundary. This difference, 1.0 foot on September 22, 1997, was then divided by the lateral distance between the two wells (2,850 feet). Based on this calculation, the horizontal hydraulic gradient in the lower aquifer is 0.00035. As illustrated in the following table, the September 22, 1997 lower aquifer horizontal hydraulic gradient is consistent with previously calculated gradients.

Report of Hydraulic Gradient in Lower Aquifer	Horizontal Hydraulic Gradient
Remedial Investigation Report (June 1991)	0.0006
Technical Memorandum (October 1995)	0.00041
Lower Aquifer Tech Memo (September 1996)	0.00047
Groundwater Monitoring Report (August 1996)	0.00047
Groundwater Monitoring Report (November 1996)	0.00049
Groundwater Monitoring Report (March 1997)	0.00040
Groundwater Monitoring Report (June 1997)	0.00044
This Groundwater Monitoring Report	0.00035

These accumulated data show a relatively low horizontal hydraulic gradient in the lower aquifer that may be decreasing with time. The lower aquifer is homogeneous like the upper aquifer. It also consists of sand, although it contains more gravel than the upper aquifer. Potentiometric maps developed since the remedial investigation in 1991 have shown a consistent gradient from south to north. Based on these hydraulic gradients and the hydraulic conductivity values calculated from slug test results during the RI, the groundwater flow rate in the lower aquifer is on the order of 50 feet per year. (Appendix A contains the lower aquifer groundwater velocity calculations.) If the hydraulic gradient is decreasing, the groundwater velocity would be decreasing proportionately.

### 3.2.4 Vertical Gradients in the Lower Aquifer

Seven nested well sets have been installed in the lower aquifer. At each location, there are two or three monitoring wells and/or piezometers, each screened at a different depth within the lower aquifer. The water levels recorded for each of these wells are summarized in Table 1 and were used to calculate vertical hydraulic gradients between well screen intervals and the top and bottom of the lower aquifer at each location. Table 3 summarizes these calculated vertical gradients. Vertical gradients in the lower aquifer have been similarly calculated for each of the past five quarters. Tabulated below are the vertical gradients calculated between the top and bottom of the lower aquifer during that time period.

Well/Piezo Nest	August 1996	November 1996	March 1997	June 1997	September 1997
MW7/MW36	0.0	0.0004	-0.0006	-0.0010	0.0
MW8/MW32	0.0002	0.0002	0.0	0.0	NA
MW9/MW34	-0.0002	-0.0002	0.0005	0.0	0.0
MW51/MW33	NA	-0.0004	0.0	0.0	0.0
MW28/PZ43	-0.0006	0.0028	0.0	0.0	0.0
MW52/MW53	NA	NA	-0.0008	-0.0004	-0.0004
MW54/MW55	NA	NA	0.0008	0.0	0.0

**Note**

Value of "0.0" indicate that the vertical gradient was not measurable.

NA = A water level necessary for the calculation was not available

From a review of the accumulated data between August 1996 and September 1997, it is apparent that there are not consistent or significant vertical gradients across the lower aquifer. ~~Therefore, it will not be necessary to measure water levels at all lower aquifer wells in each nested location in future monitoring activities. The water level from just the upper most well in each lower aquifer nest will be sufficient to develop the lower aquifer potentiometric maps. The water level measurement locations necessary to develop accurate lower aquifer potentiometric maps are presented in Section 4.1.2.~~

### 3.2.5 Vertical Gradient Between Upper and Lower Aquifer

The average groundwater elevations in the upper and lower aquifers are approximately 632 and 621 feet amsl, respectively. The confining clay layer between the upper and lower aquifer varies in thickness from greater than 30 feet to the south to less than 5 feet in the

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### 3.4 SUMMARY OF NAPL OBSERVATIONS

During investigations at the ACS NPL Site over the past ten years, non-aqueous phase liquids (NAPLs) have been observed at several locations and U.S. EPA has inquired as to the nature and extent. The locations where NAPLs have been observed are now enclosed within the barrier wall. Four areas labeled A, B, C, and D that appear to contain persistent indications of NAPLs are plotted on Figure 7.

#### Area A -- Area West of the Fire Pond

During the Remedial Investigation (RI), floating NAPLs were observed in piezometer P-37. The piezometer was destroyed in the interim between the RI and pre-design investigation and was not replaced. However, the NAPLs were found in the piezometer at each measurement event before the piezometer was destroyed.

#### Area B -- Still Bottoms Pond

During the RI, floating NAPL was observed in several soil borings in the vicinity of the closed Still Bottoms Pond.

#### Area C -- Area South of ACS Rail Spur

Borings were made from ground surface to the confining clay layer along the proposed and final barrier wall alignment during the Dewatering Barrier Wall Alignment Investigation in February 1996. Samples were field evaluated for the presence of oil with hydrophobic dye tests. In the area between the ACS rail spur and the ACS rail tracks, a thin layer of oily soil (less than 1 inch thick) was detected at the base of the upper aquifer and the top of the confining clay at several boring locations in the area labeled C. No layer was observed in any of the perimeter borings.

#### Area D -- Off-Site Containment Area

A number of test pits were excavated during the Pretreatment / Materials Handling Treatability Study in July 1997. Floating NAPLs were observed on the water table in Test Pits SA-01, SA-02, and SA-04. These are inside the area marked D on the attached map.

#### Miscellaneous Observations of NAPL

Figure 7The attached plot of piezometer locations shows four piezometers whereall upper aquifer monitoring wells and piezometers inside and near the barrier wall. Floating NAPLs have been detected in four of these piezometers. As mentioned above, P-37 contained NAPL each time the water level was measured. Three other piezometers (P-12, P-29, and P-35) which had not previously been found to contain NAPLs, did show an indication of floating NAPL during the September 1997 groundwater monitoring event. (The water level probe had an oily sheen after measurement). These are locations where the water table has been depressed by operation of the barrier wall extraction system (BWES). It is possiblelikely that this depression has caused the accumulation of NAPLs. All locations are inside the barrier wall.

### 3.5 ELEVATIONS OF THE TOP OF THE CLAY CONFINING LAYER

U.S. EPA has inquired as to the nature and extent of any NAPLs that may be on and around the Site. Where there are DNAPLs, there is the concern that they may seep to the bottom of the aquifer containing them and then flow by gravity along low areas. Several figures have been developed to evaluate the surface contours and elevation of the top of the clay layer, and evaluate the potential that there might be preferential DNAPL flow paths. The 140 soil borings made at the Site which have made contact with the clay layer are collated on Table 9. The values on this table were used with the Surfer™ contouring software package to develop an interpolated "Top of Clay" surface contour map (Figure 8). The individual boring locations and top of clay elevations are plotted on Figure 98.

One of the objectives of the Dewatering / Barrier Wall Alignment Investigation, conducted early in 1996, was to select an alignment for the barrier wall that would be outside the buried waste, as defined by the ROD and potential NAPL areas. Fifty-two borings were made in the On-Site Area and 29 borings were made in the Off-Site Area during the investigation. Each of the boreholes was advanced to the depth at which it encountered the clay layer, and continuous split spoon samples were collected at each location. Each split spoon sample was visually inspected for evidence of contamination, and samples at the aquifer clay interface were evaluated for the presence of DNAPL by using an oil-indicating field screening dye. No evidence was found of DNAPLs or LNAPLs in any of the borings located along the final alignment of the barrier wall.

Observation of the top-of-clay elevations on Figure 9 and examination of the contour plot in Figure 8 show that the top of clay elevation varies about the elevation 620 feet amsl. It appears that there may be a slight upward slope to the clay surface going from the ACS facility, south toward the landfill. The top of clay beneath the active ACS facility and On-Site Containment Area appears to be about 619 feet amsl. In the Off-Site Containment Area, the average top of clay elevation is 620 feet amsl, and at the Kapica-Pazmey Area, it is about 621 feet amsl. There is no evidence of channeling or a low area that might have resulted in gravity flow from the internal contaminant source areas, to an area now outside the barrier wall.

Prior to construction of the barrier wall in 1997, it is likely that the areas of buried waste and perhaps the areas containing NAPLs were the source of groundwater contamination. However, Figure 106 shows that these areas are now contained inside the Barrier Wall and therefore, have been eliminated as sources of groundwater contamination for areas outside the wall. The barrier wall is built to the highest current industry standards for permanence and chemical resistance. The construction materials used and QA/QC standards followed were equivalent to or in excess of those used in the construction of hazardous waste containment cells such as RCRA Subtitle C landfills. However, since waste materials remain buried inside the barrier wall, there will be long term monitoring. The monitoring will include collection and evaluation of water levels on the inside and outside of the wall to watch for leakage through or under the wall. In addition, there will be ongoing groundwater sampling of monitoring wells in all directions down gradient from

the barrier wall to provide evidence if there is a change in groundwater quality due to leakage.

### 3.6 INDICATOR CONTAMINANTS AND AREAS OF GROUNDWATER CONTAMINATION

~~In order to facilitate evaluation of the analytical data collected during the baseline groundwater sampling program, VOC, SVOC, and metals results from the four quarterly sampling events were statistically analyzed. For each analyte detected, the 95% upper confidence limit of the prediction interval (95% UCLP) has been calculated. The 95% UCLP was calculated based on the mean (i.e., the average) of the concentrations and the amount of variability in the data used to calculate the mean. Because the 95% UCLP incorporates the variability inherent in the detected concentrations, the statistical result can be used to easily compare concentrations between individual wells, between groupings of wells, and future results, when obtained, to historic results within the same well. A summary of the statistical approach, including background data and statistical summary tables, is included in Appendix B.~~

#### 3.6.1 Upper Aquifer

~~The 95% UCLPs ( $\mu\text{g/L}$ ) for VOC and SVOC compounds detected in samples collected from upper aquifer wells during the four quarters of baseline groundwater sampling are summarized on Figure 106 provides a spatial summary of the highest detections of VOCs, SVOCs, and metals in upper aquifer monitoring wells during the four consecutive quarterly sampling events of the baseline monitoring. The frequency of detection of each compound in the four sampling events is also indicated on the figure. It is worth noting should be kept in mind that the sensitivity of the analytical instrumentation performing the VOC analyses has a "detection window" of approximately two orders of magnitude. Therefore, if there is a variability in the concentrations of different compounds; that is greater than two orders of magnitude, the compound that is present at the lower concentration may not be detected. For example, if the toluene concentration in a certain sample is 1.000800  $\mu\text{g/L}$ , the analysis may not report a benzene concentration of 10  $\text{mg/L}$ 25, because it falls outside the sensitivity of the instrumentation.~~

Time trend plots for benzene and chloroethane, the primary indicators of VOC contamination in upper aquifer wells are included in Appendix C. Analytical results for samples from wells such as MW48, MW49, MW13 and MW6 that are near identified groundwater contaminant source areas show consistent, relatively high concentrations (greater than 100  $\mu\text{g/L}$ ) of benzene and chloroethane and lower concentrations of several other VOCs and/or SVOCs; the other VOCs and SVOCs were typically not detected consistently in all sampling events. Based on these results, benzene and chloroethane are indicators of groundwater impacts from the Site. These contaminants would also be good indicators of downgradient impacts because they are both relatively soluble and mobile in groundwater.



The distribution of benzene and/or chloroethane relative to identified Site source areas is consistent with the groundwater flow pattern in the upper aquifer. For example, based on the water table configurations shown on Figures 1 and 2, transport from a source or sources near MW6 would be expected to the south and southeast in the direction of wells such as MW19 and MW45; both benzene and chloroethane are present in groundwater at MW19 and MW45. Benzene at relatively low concentrations is also present at MW15 in this southern area.

Samples from several other monitoring wells located in the north and west part of the Site show detections of chloroethane and/or benzene. Groundwater flow in the north part of the Site appears to be to the northwest and west, controlled by regionally higher groundwater to the east and local discharge to the drainage ditch which enters the Site between wells MW13 and MW49. Recent changes in benzene concentrations at MW48 and MW49 between the June and September 1997 sampling events are probably attributable to changes in local groundwater flow patterns as a result of construction and operation of the PGCS. In other words, contaminants near the north part of the ACS facility are being "pulled" past these two wells and into the PGCS trench. Although high benzene concentrations are found at MW48, benzene is not detected at MW37, about 300 feet further to the west. This is strong evidence that the benzene impact ends in the vicinity of the drainage ditch. There is a strong gradient directly to the west from the ACS facility, where groundwater discharges to the PGCS. Samples from MW46, which is furthest to the west, have consistently contained benzene but only at low concentrations, indicating that the impacted area ends about 500 feet from the western ACS fence line.

To the east, only well MW12 has shown either of the indicator contaminants; one of the four samples from this well contained benzene at a low concentration. In this area, groundwater flow appears to be westerly toward the Site but the gradient is very low. Due to the low gradient, it is possible that there have been temporary flow reversals in the past that resulted in the temporary transport of benzene to this location.

Analytical results for a number of wells that are either farther from the identified sources than those where indicator contaminants are present or are upgradient of the sources, show phenol and, in some cases, bis(2-ethylhexyl)phthalate and dimethylphthalate detections. These wells include MW18, MW37, MW38, MW40, MW41, MW42, MW43, MW44 and MW47. The phthalate detections at these locations appear to reflect field or laboratory artifacts rather than site impacts for the following reasons. (This concept is further supported by lower aquifer results in section 3.54.2.)

- Elevated levels of phthalate in groundwater may be a health concern under certain conditions as indicated by the remediation level of 5.8 ug/L listed in Appendix B of the Statement of Work.
- Phthalates are recognized common field and laboratory artifacts because they may be associated with plastics.

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- Phthalates are relatively immobile in groundwater and are not likely to be the first compounds to arrive at a location downgradient from a source.
- Phthalates are only reported at a few wells (MW37, MW42, MW43 and MW44) and at all these locations they were not detected consistently in samples (i.e., only in one of the four sampling events).
- Phthalates are not reported consistently at the same locations as indicator contaminants, and hence Site impacts, are present. For example, bis(2-ethylhexyl)phthalate is reported at 8, and dimethylphthalate at 1, of the 11 locations where benzene and/or chloroethane were detected. At all these locations, the phthalate compound was detected in only one sampling event. This pattern also suggests that the phthalate detections at Site-impacted wells are field or laboratory artifacts.
- Since phthalates have been detected in samples from monitoring wells where no benzene or other VOC has been detected, it is apparent that VOCs such as benzene are not reliable indicators of phthalate occurrence. This would be true if phthalates are concluded to be a laboratory artifact.
- When bis(2-ethylhexyl)phthalate or dimethylphthalate were detected at wells with benzene and/or chloroethane, the concentrations were generally lower than those in the wells where indicator contaminants are absent. This concentration pattern is strong evidence that the phthalates are artifacts rather than a result of Site activities.

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Phenol has been reported at all monitoring wells, but generally not for all sampling events. Most of these detections do not appear to be Site-related for the following reasons. The distributions and concentrations of phenols are anomalous because they do not correlate with the distribution of known organic contaminants at the Sites, which have well defined plumes of contamination and which follow well document flow paths outward from defined source areas. Phthalates and phenols were detected in samples collected both upgradient and downgradient locations at the Sites. In addition, the highest detected phenols concentrations were found in samples collected from the deepest wells (as high as 340 ppb), while concentrations in shallow wells were much lower, and were not detected in field blanks.

It was noted that the approved sampling SOP required replacing the PVC tubing with a new length of tubing between each well. It was also noted that the water flows through the tubing at a rate of about ten feet per minute when pumped at the rates specified by the low flow sampling protocol. It was evident that water drawn from deeper wells has a longer contact time with the tubing than water drawn from shallow wells. Furthermore, it was noted that when collecting the field blank, the field technician used a very short piece of tubing, generally one to two feet in length. Therefore, a test was developed and conducted to evaluate whether the 0.5 ID., flexible, reinforced PVC, Grundfos tubing used for Low Flow Sampling could be introducing the phenols (and other compounds) into the sample

volume. A proposed testing procedure was submitted to U.S. EPA and IDEM on March 13<sup>th</sup>, 1998 and the full details of the tests and results were provide to the Agencies in a letter report, "*Results of Analytical Testing of PVC Tubing*," dated April 9, 1998.

In summary, the test demonstrated that phenols, phthalates, and some tentatively identified compounds (TICs) can be added to groundwater samples when using the Grundfos PVC tubing and following a low flow sampling protocol. Phenol was reported in the test sample at concentrations in the range of 400 ug/L in samples drawn through PVC tubing while replicating low flow sampling from a deep monitoring well. Furthermore, bis(2-ethylhexyl)phthalate was reported at concentrations in the range of 75 ug/L in the same sample. TICs found in the sample included (2-butoxyethoxy)-ethanol and dehydroacetic acid, with estimated concentrations of 200 and 56 µg/L, respectively.

The concentrations of phenol and bis(2-ethylhexyl)phthalate measured in the investigative and MS/MSD samples from PVC Grundfos tubing are higher than the levels of these compounds reported during routine sampling of groundwater at the ACS site. For example, during the September 1997 sampling event, phenol and bis(2-ethylhexyl)phthalate were measured at concentrations up to 340 and 76 µg/L, respectively. These concentration relationships indicate that leaching from PVC Grundfos tubing during routine sampling can account for the detections of phenol and bis(2-ethylhexyl)phthalate in monitoring well samples from the ACS Site. The typical pattern of higher concentrations of both of these compounds in the deep wells also suggests that PVC Grundfos tubing is the source. Again as an example, during the September 1997 sampling event, phenol was measured at concentrations up to 130 µg/L in shallow wells and 340 µg/L in deep wells; bis(2-ethylhexyl)phthalate was measured at concentrations up to 15 µg/L in shallow wells and 76 µg/L in deep wells. Higher concentrations in deeper wells are consistent with a source in the tubing because longer sections of new PVC Grundfos tubing are used in these wells during routine sampling.

- ~~• In many wells that are peripheral to the Site and do not show benzene and/or chloroethane (MW18, MW37, MW38, MW40, MW41, MW42, MW43, MW44, and MW47), phenol is the only compound detected (at some wells phthalates may also be reported, but as noted above, these compounds appear to be field or laboratory artifacts).~~
- ~~• The highest 95% UCLP phenol concentrations (about 200 µg/L) are at locations near site sources where benzene and chloroethane levels are also high (e.g., MW48 and MW49). This relationship suggests that site sources may contribute some phenol to groundwater. However, the concentrations near these source areas are not high enough to account for the levels at most downgradient wells that contain benzene and/or chloroethane and, especially, peripheral wells where benzene and/or chloroethane are absent.~~
- ~~• The phenol levels in some of the peripheral wells are higher than nearby and upgradient wells that contain benzene and/or chloroethane. For example, the~~

phenol concentration at MW47 is higher than at MW19, and the concentrations at MW41 and MW43 similar to that at MW45, which shows relatively high benzene and chloroethane concentrations.

Together, these relationships suggest another widespread source for phenol. It is likely, since the area was largely a wetland, that the phenols at most locations are natural, produced by the decay of organic material.

Assuming that detections of only phenol (and possibly phthalates) are unrelated to Site contamination, three areas of groundwater contamination have been designated in the upper aquifer: south, north, and west. Each area includes wells where groundwater in the upper aquifer has been affected by site activities. The south area includes wells MW6, MW19 and MW45. Based on the pattern of groundwater flow in this area, well MW18 is upgradient with respect to the area of groundwater contamination, wells MW47 and MW43 are downgradient, and wells MW15, MW41, MW44 and MW47 are sidegradient. The low levels of benzene reported at MW15 suggest that this well is located at the boundary of the south area.

The north area includes wells MW48 and MW49. Based on the pattern of groundwater flow in the north part of the Site, MW40 is upgradient from the area of groundwater contamination, MW37 is downgradient and MW38 and MW39 are sidegradient. Well MW11 may also be sidegradient based on the one reported detection of tetrachloroethene.

The west area includes wells MW13 and MW14. Prior to the time when the PGCS began discharging to the wetlands, MW46 was downgradient from the source area at the ACS plant. However, the continuous PGCS discharge since June 1997 introduces a mound of clean groundwater between the site and MW46. Future sampling at MW46 will collect primarily the treated water that is discharged into the wetland and infiltrates into the ground.

### 3.6.2 Lower Aquifer

The 95% UCLPs ( $\mu\text{g/L}$ ) for VOC and SVOC compounds detected in samples collected from lower aquifer wells during the four quarters of baseline groundwater sampling are summarized on Figure 117 provides a spatial summary of the highest detections of VOCs, SVOCs, metals in upper aquifer monitoring wells during the four consecutive quarterly sampling events of the baseline monitoring. The frequency of detection of each compound in the four sampling events is also indicated on the figure (See comment in Section 3.5.1 regarding potential to mask low level VOC detections if one or more compounds in a sample has a concentration two orders of magnitude higher than another compound).

Time trend plots for benzene and chloroethane in lower aquifer wells MW9 and MW10C are included in Appendix C. Benzene and/or chloroethane have been reported in the lower aquifer at only a few locations. Chloroethane was detected at MW9 (soon to be replaced by MW9R), MW10C and MW29, and benzene at MW9, MW29, MW33 and MW53. The presence of indicator contaminants at MW9 is attributable to downward leakage along the

well casing from the upper to the lower aquifer. A tracer test conducted at this location, as discussed in Section 2, documented that leakage. MW29 is located adjacent to MW9, but it is screened 15 feet lower. The concentrations of benzene at MW29, MW33 and MW53 are much lower than at MW9. The detections at MW29 indicate that the benzene extends approximately 15 feet below MW9. The other detections at MW10C, MW33 and MW53 likely represent transport through the lower aquifer from MW9, which is directly upgradient.

Bis(2-ethylhexyl)phthalate was reported in samples from many lower aquifer wells; dimethylphthalate was detected at only one well. As in the upper aquifer, the occurrence of these compounds does not correlate with benzene and/or chloroethane, providing further evidence that the phthalate detections at the Site are due to field or laboratory artifacts. (See Section 3.6.1 on Pages 15 and 16 for further details.

Phenol was reported for most of the lower aquifer wells, including wells such as MW22 and MW50, that are upgradient from the Site. Moreover, the phenol levels at some of the lower aquifer wells, including upgradient wells, were higher than those measured in the shallow aquifer, even near identified source areas. These distribution and concentration patterns strongly support the earlier conclusion that phenols are present in groundwater throughout the area and are not derived from site activities.

Based on the baseline groundwater sampling results, only one area of groundwater contamination is present in the lower aquifer. This area includes MW9/MW29 and the downgradient wells MW10C, MW33 and MW53.

### **3.7 TENTATIVELY IDENTIFIED COMPOUNDS (TICS)**

Tentatively Identified Compounds (TICs) were detected in several upper and lower aquifer monitoring wells. Four TICs were reported in two or more monitoring wells in the September 1997 sampling results. The following is a tabulation of tentatively identified compounds, number of detections, and highest detected concentrations

<b><u>Tentatively Identified Compound</u></b>	<b><u>Number of Detections</u></b>	<b><u>Maximum Concentration</u></b>
Chlorodifluoro-methane	4	95 ug/L
Ether	7	12,000 ug/L
Tetrahydrofuran	5	170 ug/L
2-ethyl-1-hexanol	9	28 ug/L

Table 10 contains a more detailed listing of these TICs and monitoring well locations. The complete listing of TICs for individual monitoring wells is compiled in Appendix C and D.

## 4.0 PROPOSED INTERIM GROUNDWATER MONITORING PLAN

### 4.1 SCOPE AND OBJECTIVES

The Statement of Work (SOW) included as Attachment 2 of the September 30, 1994 Administrative Order for the American Chemical Service Superfund Site states that the respondents shall implement:

"...a groundwater monitoring program designed to detect changes in water quality or concentrations of hazardous substances, contaminants, or pollutants in the groundwater at and beyond the point of compliance and shall include upgradient, downgradient and transgradient monitoring. The groundwater monitoring program shall provide for verification sampling and updating of the current local hydrogeological setting and associated conditions. The program shall consist of summarizing currently available information; installing additional monitoring wells, piezometers, and soil borings; and performing in field measurements or analysis of water levels, pH, temperature, specific conductance, hydraulic conductivity, and other measurements or analyses as approved by EPA, after reasonable opportunity for review and comment by the state. The results of this investigation shall be submitted in report form to EPA for review and approval and shall be incorporated into the work plans."

As discussed in Section 3.2, construction work conducted recently at the ACS Site has modified groundwater flow patterns locally. A barrier wall with internal extraction trenches (BWES) has been constructed around the areas of buried waste and a series of piezometers has been installed to allow documentation of the water levels inside and outside the barrier wall. A perimeter groundwater containment system (PGCS) that includes a 1,500 foot extraction trench has also been installed to prevent further off-site migration of contaminated groundwater to the north and west of the ACS facility. Piezometers have been installed along the trench to allow documentation of gradients induced by pumping. A water treatment plant has been constructed to treat the groundwater extracted from inside the barrier wall and from the PGCS. Influent and effluent samples will be collected to document the quality of the untreated and treated water, as part of the Site monitoring.

Remedial activities will be conducted at the Site for the next several years and so it is premature to develop the long term monitoring Plan at this time. On the basis of the results of the Baseline Groundwater Sampling, an interim groundwater monitoring plan has been developed. In general, groundwater sampling will be conducted semi-annually at the majority of the wells in the monitoring network. One annual sampling event will be conducted for full scan analyses of the samples and the other will be conducted for a reduced list of indicator parameters. The following site-specific objectives have been

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developed for the Interim Monitoring Plan ~~long term monitoring plan~~ at the ACS NPL Site during remedial design and remedial action ~~construction~~ activities:

- Collect water level data to monitor groundwater flow in the upper and lower aquifers and calculate the hydraulic gradients between the aquifers
- Collect water level data to document the performance of the PGCS and BWES and to evaluate changes in the groundwater flow system resulting from the remedial actions (these activities are outlined in the Performance Standard Verification Plan, April 1997)
- Collect and analyze samples of the untreated groundwater to provide characterization of the water quality inside the barrier wall
- Collect and analyze samples of treated water to document compliance with the effluent standards
- Collect and analyze groundwater samples from upgradient monitoring wells in the upper and lower aquifer to document background groundwater quality
- Collect and analyze groundwater samples from the monitoring wells at the down-gradient boundaries of the site to closely monitor the status of the boundaries of groundwater impacts
- Collect and analyze groundwater samples from the interior of the areas of contaminated groundwater to document how concentrations change with time and in response to the remedial actions
- Assess progress toward attaining cleanup objectives in contaminated areas.

The proposed monitoring plan has been developed to meet these objectives, in the context of the groundwater flow system and the nature and extent of the contaminated groundwater.

As additional information becomes available, it will be analyzed with respect to the above objectives. If the new information indicates that changes to the monitoring program (either additions or deletions) are needed to meet the objectives, these changes will be proposed to U.S. EPA for approval. Similarly, U.S. EPA may seek ~~require~~ additional groundwater monitoring wells or laboratory analyses based on the need to meet the monitoring objectives.

~~The three variables in the groundwater monitoring plan are: 1) sampling locations, 2) chemical constituents, and 3) sampling frequency. The following sections present these variables in the context to the monitoring objectives.~~

## 4.2 WATER LEVEL MEASUREMENTS

Water level measurements will be made quarterly at upper and lower aquifer monitoring wells and piezometers. Field time to collect water level data at all points on Table 11 will be scheduled to be completed in no more than two days, in order to minimize the effects of changes in water levels with time. The water levels will be tabulated and used to calculate groundwater elevations, gradients and develop contour plots of the water table and lower aquifer potentiometric surface. The proposed water level measurement program includes the upper and lower aquifer wells and the staff gauge listed in Table 119 (this table is designed to serve as a field work sheet). The proposed networks of upper and lower aquifer gauging points are described below.

### 4.2.1 Upper Aquifer Gauging Points

Proposed upper aquifer gauging points include:

- Those wells that are to be sampled as part of the upper aquifer sampling program (~~see Section 4.2~~)(See Section 4.3)
- Those wells and piezometers that are already included as part of the PGCS and BWES gauging activities
- Wells or piezometers that fill remaining gaps in the gauging network
- A staff gauge in the pond to the southeast of the Site

The proposed upper aquifer wells and staff gauge in the water level measurement program are shown on Figure 12. This figure shows that the distribution of gauging locations is adequate to prepare a representative water table map. Water levels will be measured at these wells, piezometers and staff gauge during each sampling event, and a water table map will be developed using the data collected.

### 4.2.2 Remediation Component Gauging Points

Piezometers have been installed to provide water level information in the vicinity of the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall and Extraction System (BWES).

The PGCS consists of a 1,500 foot long groundwater extraction trench located north and west of the ACS facility (Figure 12). Five arrays of three piezometers each have been constructed across the extraction system. At each location, one piezometer is located in the center of the extraction trench, one piezometer is located on the inside (south or east) of the trench and one piezometer is located outside (north or west) of the trench. The piezometer groups are shown on Table 11, numbers P81 through P92.

The Barrier Wall is a 4,500 foot vertical containment wall constructed from combined 60 mil high density polyethylene (HDPE) and 16 inch bentonite slurry mixture. The wall is keyed two feet into the confining clay layer, located at an approximate elevation of 620 feet



above mean sea level, which is between 20 and 35 feet below ground surface. The wall was constructed to completely surround the active ACS Facility, the Off-Site Containment Area, and the Kapica-Pazmey Area. Eight 100 foot long extraction trenches were constructed inside the wall to extract groundwater and pipe it to the PGCS plant for treatment and release. Eight pairs of piezometers, numbered P93 through P108 were installed around the circumference of the barrier wall (Figure 12). In each pair, one piezometer is screened just outside the barrier wall and the other is just inside the barrier wall.

Water levels will be measured at each of these piezometers each quarter and compiled and evaluated with the overall Site Monitoring Reports.

#### **4.2.3 Lower Aquifer Gauging Points**

Because groundwater flow in the lower aquifer is simpler (north with a small northwest flow component), fewer gauging points are necessary to depict the potentiometric surface. Therefore, the wells listed in Table 119 are proposed to be gauged during each sampling event. At clustered locations along the northern boundary of the Site (Figure 139) only the upper most lower aquifer wells are proposed for gauging, because water levels from the middle or lower, lower aquifer wells does not yield additional useful information. These wells will provide adequate data to prepare a potentiometric surface map for the lower aquifer.

### **4.3 MONITORING WELL SAMPLING**

#### **4.3.1 Semi-Annual Sampling**

The sampling schedule for the interim groundwater monitoring plan is summarized in Table 12 for the upper aquifer wells and Table 13 for the lower aquifer wells. In general, there will be two major sampling events each year and two minor sampling events. The major sampling events will be conducted in the spring and fall. Each spring all the up gradient and down gradient wells in both aquifers will be sampled for full scan TCL/TAL parameters. An indicator event will be conducted each fall. In this event, all wells in the monitoring network, including upgradient, downgradient and side gradient wells will be sampled and analyzed for indicator parameters. The indicator parameters will be:

VOCs: PCE, TCE, TCA, DCE, 1,2-DCA, VC, Chloroethane, and Benzene

SVOCs: Phenol, Phthalates

Metals: Arsenic and Lead

#### **4.3.2 Quarterly Sampling**

Three monitoring wells will also be sampled during the other quarters, summer and winter. These include upper aquifer monitoring wells MW48 and MW49 and lower aquifer monitoring well MW9R. As shown in Tables 12 and 13, these three wells will be sampled once each year for the full TCL/TAL parameter list (along with all the other wells) and for indicator parameters in the other three quarters of the year.

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#### 4.3.3 Sampling Protocols

All monitoring wells will be purged and sampled using low-flow methods in accordance with the approved Monitoring Well Sampling Proposal and Protocol SOP for the Upper Aquifer Investigation (revision: ~~July~~revision: July 25, 1996) and other Agency-approved SOPs. Field parameters, pH, specific conductance, temperature, and turbidity, will be measured and recorded during well purging. Sampling activities are expected to be conducted over a two week period. Standard SW-846 methods will be used for laboratory analyses. Data validation will be conducted on all samples collected.

As indicated in Section 4.1, water levels will be measured at the upper and lower aquifer monitoring wells, piezometers, and staff gauges listed in Table 11 once each quarter, coinciding with the sampling that is conducted. A sufficient number of field technicians will be used so that all the water level locations can be covered in one working day, to minimize potential water level variability with time.

#### 4.4 PRIVATE WELL SAMPLING

The ACS Group will give U.S. EPA four weeks notice of the planned annual collection of samples from five residential wells in the ACS vicinity. If U.S. EPA requests a change in the sampling within two weeks of the event, the ACS group will consider the technical basis provided by the U.S. EPA and schedule the necessary sampling to coincide with one of the groundwater monitoring events. As in the past, the ACS group is committed to collect whatever data is technically justified to meet its obligations to the U.S. EPA. The following private wells are proposed for sampling (assuming owners will provide access):

Well Identifier	Street Address
PW-Y	1000 Reder Road
PW-A	1007 Reder Road
PW-B	1009 Reder Road
PW-C	1029 Reder Road
PW-I	739 S. Arbogast

The well locations are shown on Figure 6. If the U.S. EPA notifies the ACS group prior to the sampling date, one or more of those five samples can be assigned to alternate locations selected by U.S. EPA. Each well will be sampled following the approved private well sampling protocol, and the samples will be analyzed for full scan TCL/TAL parameters. To eliminate delays in reporting, the analytical laboratory will be asked to provide the analytical results as soon as they are available, rather than waiting and providing the results to the ACS Group along with the results of all other sampling.

## 4.5 OTHER MONITORING

In accordance with the Performance Standard Verification Plan (PSVP) for the PGCS, the influent and effluent of the groundwater treatment system will be sampled during each of the periodic sampling events. Results for these samples will provide information to document the performance of the PGCS.

## 4.6 REPORTING

A report will be produced each quarter to provide the collected data and analysis to the Agencies. The reports will be submitted to the Agencies, not more than ten weeks after the completion of the sampling event. Each report will include tabulations of data, evaluation of any changes in groundwater flow and analytical data, and recommendations for actions, if necessary, for the next sampling event.

### 4.6.1 Tabulation of Data

Water level data, field observations, and analytical results will be tabulated each quarter for each well sampled.

### 4.6.2 Evaluation of Changes

The calculated groundwater elevations will be used to develop contour plots of the upper aquifer and lower aquifer, as well as to calculate vertical gradients between the upper and lower aquifer. These will be compared to the previous maps and gradients.

Appendix C has been included in the report, and it lists the maximum concentration of each contaminant detected in each monitoring well during the groundwater sampling at the Site. The results from future sampling rounds will be compared to this list, and any detections that exceed the concentrations listed in the table will be highlighted. Each highlighted value will be evaluated for significance, in the analysis section of the corresponding groundwater monitoring report.

The evaluation will take a number of factors into account to determine significance. Factors will include: groundwater flow direction, concentration of the same compound in the well during previous sampling events, concentrations of the same compound at other nearby wells, and magnitude of the exceedance of the trigger. The exceedance will be considered significant if it shows that the area of groundwater contamination is increasing in area or increasing in concentration. Trigger events will be reported within 90 days of completion of the sample collection, and the report will include a recommendation to the Agencies for action.

### 4.6.3 Recommendations for Action

Actions may range from a limited action such as waiting until the next sampling event for another evaluation, to actions such as additional sampling, modification of the interim

| monitoring programs~~sampling plan~~, or implementation of additional remedial or corrective actions.

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## ENCLOSURE

**Comments Regarding the  
Review of the Technical Memorandum; September 1997  
Groundwater Sampling Results Report, and Approval  
with Modifications of the Proposed Groundwater  
Monitoring Plan for American Chemical Services,  
Inc., NPL  
Superfund Site, Griffith, Indiana**

The United States Environmental Protection Agency provides the following comments on the Technical Memorandum, September 1997 Groundwater Sampling Results Report and Approval with Modifications the proposed Groundwater Monitoring Plan.

### General Comments

1. Subsequent to the submittal of the Technical Memorandum, several meetings were held with representatives from the group to discuss the proposal. Additional information was also submitted on February 24, 1998, March 2, 1998, and April 1, 1998, to address some questions/issues identified by U.S. EPA. While U.S. EPA appreciates the additional information, it has caused EPA longer than anticipated to review the proposal due to the volume of material that needed to be reviewed.
2. The Unilateral Administrative Order, page 22, section 20c, states that long-term monitoring is required to ensure that performance standards are being met. Performance standards are defined on page 7 of the UAO as the cleanup standards in the ROD and SOW. The SOW, page 14, section 2, states that groundwater monitoring wells will need to be sampled quarterly for parameters listed in Appendix B to the SOW.

U.S. EPA previously indicated that when the Upper and Lower Aquifer Investigations were complete, U.S. EPA would approve a quarterly groundwater monitoring program in accordance with the UAO. Subsequently, U.S. EPA indicated, that after the initial baseline monitoring period, U.S. EPA was amenable to giving due consideration to allowing the Order Respondents to modify the long-term groundwater monitoring program, if requested and justified. In this regard, based upon a request from the Order Respondents, U.S. EPA gave due

consideration to approving a modification to the long-term groundwater monitoring program.

U.S. EPA hereby approves a monitoring program which incorporates a reduced frequency and a reduced number of analytes from the previously approved monitoring program. U.S. EPA believes that the newly-approved monitoring program is technically justifiable. This conclusion is reached based upon knowledge gained during the Upper and Lower Aquifer Investigations and the baseline monitoring events. This decision is based upon the homogeneity of the upper and lower aquifers and the low flow velocities. U.S. EPA believes that the new sampling program will still serve to monitor the groundwater and protect human health and the environment.

Specifically, rather than quarterly monitoring as previously required, U.S. EPA is approving semi-annual monitoring (with several exceptions). In addition, rather than a full scan, U.S. EPA is requiring analysis of the approved indicator parameters, at a minimum, for one of the two required annual sampling events. These sampling events shall take place in the spring and fall of each year. U.S. EPA continues to believe that sampling of the wells within the site and within the plume are needed to better understand the contamination in the source areas, as well as sentinel wells to monitor potential migration.

Given these considerations, U.S. EPA hereby approves, with modifications, the proposed monitoring program in the November 1997 Groundwater Monitoring Report. Following is the approved program which must be documented in the revision to the report. At a minimum, water levels must be measured and samples collected for analysis in the wells as indicated below.

The next round of sampling, which shall occur during the week of June 1, 1998, shall consist of the same requirements for the staff gages/piezometers/wells and analytical parameters as the previously approved program for the upper and lower aquifer wells. After that, then the following program shall be applicable, at a minimum.

The following wells shall be sampled on a quarterly basis: MW-48, MW-49, and MW-9R. MW-48 and 49 shall be sampled for full scan for one of the four quarters; for the other three quarters, the wells shall be sampled for indicator parameters (as

defined below). MW-9R shall be sampled for full scan for the first year to establish a baseline; after that, it can be treated the same as MW-48 and 49.

The following upper aquifer wells shall be sampled on a semi-annual basis: M-4S, MW-6, MW-13, MW-14, MW-15, MW-18, MW-19, MW-37, MW-38, MW-39, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, and MW-47. One sampling event shall include analysis for indicator parameters, and the other shall be sampled for full-scan analysis.

The following upper aquifer wells shall be sampled on a semi-annual basis for indicator parameters: MW-11, MW-12, MW-40, and M-1S.

The following lower aquifer wells shall be sampled on a semi-annual basis: ATMW-4D, MW-08, MW-10C, MW-23, MW-24, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33, MW-50, MW-51, MW-52, MW-53, MW-54, and MW-55. For these wells, one sampling event shall include analysis for indicator parameters, and the other shall be sampled for full-scan analysis (VOC, SVOCs, PCBs, and metals).

The following lower aquifer wells shall be sampled on semi-annual basis for indicator parameters: MW-7, MW-34, and M-4D.

The indicator parameters shall consist of PCE, TCE, TCA, DCE, VC, chloroethane, benzene, phthalates, phenols, arsenic, and lead.

ACS Order Respondents must give at least 4 weeks advanced notice of the intent to sample. Sampling and analysis shall be conducted in accordance with the approved SOPs (with the exception of the tubing.) See specific comment #60 below about collection water levels. As is described in comment #61 below, full data validation must be employed. A report which discusses the results of each sampling event shall be submitted to the U.S. EPA within 10 weeks following collection of the samples. If additional information becomes available that the groundwater monitoring program is inadequate, then U.S. EPA, after reasonable review and comment by the state, may require additional groundwater monitoring wells and laboratory analysis of additional parameters.

**Response:** Tables 12 and 13 in the September 1997 Groundwater Monitoring Report have revised provide a detailed indication of the

sampling proposed in response to this comment and several others later in this document. It shows four quarters each for the years 1998 through 2000 and proposes the wells and parameters to be included each quarter. In accordance with this comment, a full scan event is proposed each spring and an "indicator" sampling event is proposed each fall. The table stops with the year 2000, not because sampling would stop, but because the schedule unless modified with U.S. EPA approval, will be consistent in following years.

Text has been added to the report indicating that as additional information becomes available, it will be analyzed in the context of the groundwater monitoring objectives. If the new information indicates that new wells or additional parameters are needed to meet the monitoring objectives, these will be proposed to the U.S. EPA. Similarly, if analysis of the data shows that certain wells and / or parameters are not providing information useful in meeting the monitoring objectives, these will be proposed for elimination from the monitoring plan.

Text has been added to Section 4.3.3 on page 22 of the revised Groundwater Monitoring Plan to state that sampling will be conducted in accordance with approved SOPs. Text has been added to Section 4.6, on page 23 of the revised Plan stating that a report will be submitted to U.S. EPA within 10 weeks following completion of the sampling.

3. The proposal presented by the ACS Order Respondents relies, in large part, on the use of advanced statistical methods. In the meetings, U.S. EPA has articulated severe reservations about the use and significance of the statistical methods proposed and specifically the use of the 95% upper confidence limit of the prediction interval (95% UCLP), as presented. Based upon this, more information was provided by Order Respondents. U.S. EPA has spent a considerable amount of time evaluating the proposal. However, U.S. EPA still has reservation about the use of the statistics. U.S. EPA could provide numerous comments to support the conclusion, if wanted. In the interest of methods presented are not supportable. Hence, the proposal using the statistical methods is not approved. Delete all references to the UCLP. As stated above, U.S. EPA will provide specific comments upon request.

**Response:** Reference to the previously proposed statistical method have been deleted from the text, tables and figures of the revised baseline monitoring report and groundwater monitoring plan. The statistical methods to trigger response, have been replaced by a direct numeric method as agreed upon between the ACS Group and U.S. EPA at recent meetings and as described in Comment 62, later in this document.



4. Subsequent to the submittal of the Technical Memorandum, U.S. EPA was informed by way of a letter dated March 16, 1998, that the laboratory that has been used by the Order Respondents and approved by U.S. EPA for analysis of groundwater, soil and sediment samples has filed for bankruptcy. Two other laboratories have been proposed; these are CompuChem, a division of Liberty Analytical Corp. (NC), and Quanterra Environmental Services.

**Response:** Quanterra Environmental Services has been selected as the laboratory, and the samples collected in June 1998 were analyzed at their facilities.

5. Subsequent to the submittal of the Technical Memorandum, U.S. EPA was offered, at the February 24, 1998, meeting, an explanation for the phenol detections from Order Respondents that there exists a possibility that the tubing used to sample the groundwater may have contributed to phenol contamination detected in the groundwater. EPA agreed that the suggestion of the phenol being associated with the pump tubing is a plausible hypothesis and should be presented in this document and a clear proposal for testing the hypothesis was made and implemented. U.S. EPA was informed by way of a fax dated April 1, 1998, the results of the investigation. However, phenols are contaminants of concern at this site; that is, phenol is a contaminant which is associated with past site activities. The information recently presented will be reviewed further by U.S. EPA based upon the submissions made by the Order Respondents. Until this issue is resolved, phenols should be included in the list of indicator compounds. U.S. EPA and IDEM have not had adequate time to fully review this information. EPA will review the submittal along with the review of the data from groundwater samples from the next round of sampling using the polyethylene tubing, and make a decision for future sampling events. In the meantime, polyethylene tubing may be used in the next sampling event.

**Response:** As detailed in the response to general comment 2 above, the sampling schedule has been set up so that the next sampling round will be for full scan TCL/ TAL parameters. As Tables 12 and 13 show, Indicator parameters will be sampled in next in the fall of 1998. The current notes on these tables defining the indicator list include phenol and phthalates. If and when sampling results indicate that the phenol and / or phthalates are protocol or lab related rather than Site related, the case will be made to the U.S. EPA with a request to eliminate the anomalous compounds from the indicator list for appropriate wells.

When approved, Tables 12 and 13 will be modified accordingly.

**Specific Comments**

6. **Page ii, Executive Summary, fifth paragraph., second sentence.**

Rephrase as follows: "at and around the Site."

**Response:** The text has been changed as requested.

7. **Page ii, Executive Summary, 2nd paragraph.**

First sentence states that MW9 is the only observed lower aquifer impact, but there are elevated levels of chloroethane at MW10C (420 ppb) and ether (a VOA TIC at 12,000 ppb) at MW 51. Ether has been consistently detected at high levels at MW51, which is screened at the top of the lower aquifer. Indicate this.

**Response:** The additional provided to U.S. EPA in March has been added to the text of the revised report.

8. **Page ii; Executive Summary, 4th paragraph.**

Remove the editorial statement "these appear to be unrelated to the ACS site and".

**Response:** The text specified by this comment has been deleted and replaced by a description of the data regarding trace level VOCs detected in several private wells.

9. **Page ii; Executive Summary, last paragraph.**

Remove "Nonetheless" from the second sentence.

**Response:** The text has been changed as requested.

10. **Page iii; Executive Summary, first paragraph, fourth sentence.**

Replace "that" with "if".

**Response:** The text has been changed as requested.

11. **Page iii; Executive Summary, 3rd paragraph.**

As is stated above, the statistical method proposed is not acceptable. Determining which indicator parameters must be based upon analyzing the results of spatial and historical data.

**Response:** The text has been changed to remove the reference to statistical methods.

12. **Page iii; Executive Summary, 4th paragraph.**  
See General Comment #2. Clarify the approved sampling regime in the text.

**Response:** The text has been changed as requested.

13. **Page 2, Section 2.1; Purpose and Scope, objectives, under second bullet.**  
Rephrase as follows: monitor the effect, if any, of the remedial actions consisting of the barrier wall and partial perimeter groundwater containment system "at and around the Site", and other remedial actions.

**Response:** The text has been changed as requested.

14. **Page 3, Section 2.2.2; Water Levels, Vertical Gradients Calculated for the Upper and Lower Aquifers.**

Gradients were calculated in this section using different methods. Vertical gradients in the upper aquifer wetlands area were calculated using the vertical distance between the midpoints of screens.

Vertical gradients in the lower aquifer were calculated using the vertical distance between the bottom of the upper screen and the top of the lower screen. These gradients should be calculated using a consistent method. Please rectify this discrepancy.

**Response:** Hydraulic gradients are calculated from two variables: the change in water elevation between two points and the distance over which that change occurred. The vertical gradient is calculated by dividing the change in water level between two adjacent wells screened at different depths by the vertical distance over which the water level change occurred. U.S. EPA's request to use a "consistent" method is probably based on an assumption that there is a simple linear relationship between change in water level and vertical distance between the two well screens. However, the vertical well spacing is not the only variable, and so the relationship is not a linear one. While using the method requested by U.S. EPA would not likely result in any major change in groundwater flow interpretation, it would result in less precise gradient calculations than the methods used in the report. Text has been added in Section 2.2.2 on Pages 3 and 4 to explain the basis for using different methods used to calculate gradients in the upper aquifer, the lower aquifer, and across the confining clay layer.

15. **Page 4, Section 2.2.2; Water Levels, Vertical Gradients calculated for the Upper and Lower Aquifers.**

The head difference of one foot is explained as "clearly a measurement error". It is not clear why this "error" was not noted in the field and corrected then. Please address this.

**Response:** A crew of six spends a full day to collect water levels at all 170 measurement locations in a single to achieve a database as representative as possible of "a single moment." We have made the decision not to provide the measuring crew with previous measurements at each location while they are in the field, since this might result in biasing the sampling results (i.e., the technician might re-measure in an attempt to get closer to previous values, if an anomaly is seen). The downside to this approach is that it is not immediately apparent to the sampler if an error is made in the field. Since the technician does not have the results of previous measurements while in the field, an error only becomes apparent when the groundwater elevations are being plotted to develop a contour map.

During plotting, it is dramatically apparent if an error as great as one foot has been made in the measurement. Text has been added to Section 2.2.2 explaining that the measurement error could not be corrected since it was not noticed in the field.

16. **Page 4, Section 2.2.3; Water Levels, Calculated Vertical Gradients.**

The vertical gradients between the Upper and Lower Aquifers were calculated using as the vertical distance the thickness of the clay confining layer between wells in each nest. They were calculated using a different method from the previous gradients. If there is no compelling reason, then the gradients must be calculated using consistent methods. Please rectify.

**Response:** Further explanation of the appropriate methods to calculate vertical gradients are added to the text in Section 2.2.3. See response to comment 14 above for description of the technical issues involved.

17. **Page 5, Section 2.4; Residential Well Sampling.**

Make mention of the prior report which discusses the local residential drinking water wells.

**Response:** Residential wells were sampled in 1996 and 1997. Text has been added to Section 2.4 to make note of these sampling results.

18. **Page 5, Section 2.4; Residential Well Sampling.**

Provide more details to back up this statement. Discuss when the well was installed and the historic contamination.

**Response:** Trace levels of VOC contamination have been detected in samples collected from two water supply wells (PW-R and PW-H). We don't have direct information to indicate when the residential wells were installed. We don't have historic data on contamination although we have the results of the previous sampling at PW-R. Text has been added, stating that the well has been sampled twice and that the results are

similar in both sampling events. Table 2-6 in the RI report includes the best available information regarding well construction dates for a few of the wells, but we have not been able to obtain well construction dates for most of the wells. The indications are that the wells in this vicinity were constructed in the 1950's, 1960's, and 1970's.

19. **Page 5, Section 2.4; Residential Well Sampling.**  
Provide the address of the wells which were sampled.

**Response:** Address numbers have been added to the residential wells listed in Section 2.4, as requested.

20. **Page 5, Section 2.4; Residential Well Sampling.**  
As before, Respondents must request that preliminary residential well sampling results be reported from the laboratory on an expedited basis. Indicate this in the proposal.

**Response:** Section 2.4 is a report on the sampling that was conducted in September 1998. Text has been added to Section 4.4 to indicate that in future sampling events, the analytical laboratory will be asked to provide the residential well results as soon as they are available. (To clarify, the sampling analysis itself is not conducted on a rush or otherwise expedited schedule.)

21. **Page 5, Section 2.4; Residential Well Sampling.**  
Include the address number for each of the residential well sampling locations.

**Response:** As indicated in the response to Comment 19 above, address numbers have been added to the residential wells listed in Section 2.4.

22. **Page 7, Section 3.2.1; Groundwater Flow the Upper Aquifer, fourth paragraph.**  
Delete "and the relative simplicity." U.S. EPA believes that the groundwater flows are not simple. For example, while the groundwater flow follows the same general pathway as the area, there is a high degree of variability in recharge and discharge on a local scale hence producing local variabilities. Free-phase liquids present at the site may not be driven by groundwater flow gradients, and have the potential to produce dramatic variability that is unrelated to the hydraulic gradient. In addition, recent additions to the site such as the barrier wall will contribute to local variability.

**Response:** The clause has been deleted as requested by U.S. EPA.

23. **Page 7, Section 3.2.2; Vertical Gradients in the Upper Aquifer.**  
Begin the sentence with the following. "Due to the

presence of higher levels of benzene at the base of the aquifer relative to that of the surface of the upper aquifer which was determined during the tracer investigation. . ."

**Response:** The text in the revised report has been modified as requested by U.S. EPA.

24. **Page 8, Section 3.2.2; Vertical Gradients in the Upper Aquifer.**

Rephrase such as: From the accumulated data between August 1996 and September 1997, there are not consistent vertical gradients across the aquifer. While, in general the vertical gradients are upwards, which is the typical occurrence in a wetland area shelter groundwater discharges to the surface. However, there is some fluctuation between upwards and downwards. Delete the last sentence.

**Response:** The text has been revised to simply report the observations from the data: that out of 20 calculated gradients, 14 were upward, 3 were downward and 3 were zero. The last sentence has been deleted as requested by U.S. EPA.

25. **Page 8, Section 3.2.2; Vertical Gradients in the Upper Aquifer, last sentence.**

Remove sentence beginning with "Therefore, it will not be necessary to continue collecting water levels at these piezometers pairs in future monitoring events."

**Response:** The sentence has been deleted as directed by the U.S. EPA.

26. **Page 9, Section 3.2.4; Vertical Gradients in the Lower Aquifer.**

Remove the following sentences from the text:  
"Therefore it will not be necessary to measure water levels at all lower aquifer wells in each nested location in future monitoring activities. The water levels from just the uppermost well in each lower aquifer nest will be sufficient to develop the lower aquifer potentiometric maps."

**Response:** The sentence has been deleted as directed by the U.S. EPA.

27. **Page 9, Section 3.2.5; Vertical Gradient Between Upper and Lower Aquifer, Second Sentence.**

In the sentence, "5" feet should be "2" feet.

**Response:** U.S. EPA has made a similar request in a comment on a previous investigation (see Comment 21, in the U.S. EPA letter:

***"Disapproval of the First Draft, Lower Aquifer Investigation Technical Memorandum; American Chemical Service NPL Superfund Site, Griffith, Indiana, dated August 5, 1996.***

In our response, in a letter dated September 27, 1996, and the accompanying report, we responded by including the following text.

From the RI investigation, it was evident that the clay confining layer was greater than 20 feet thick to the south of the site and less than five feet thick at the northern side of the Site (2.5 and 4.0 feet at CB-1 and MW33 , respectively).

However, even after making three boreholes to install MW10C during the RI, uncertainty remained regarding the thickness of the confining clay layer in an area 300 feet northwest of the ACS facility (Figure 2). Three boreholes were made in March and April 1990 to place a well at the MW10C location. The drillers experienced difficulty in maintaining an open hole and collecting representative samples. An additional soil boring, CB-1, was advanced to determine the clay thickness in the vicinity of MW-10C. The thickness of clay in CB-1 appeared to be approximately 2.5 feet. The boring logs for MW10A, MW10B, MW10C, and CB-1 are included in Appendix A1, and these show the uncertainty in the thickness of the clay layer that remained after the RI. Approximately 3.5 feet of lean clay was indicated between a depth of 15.5 and 19 feet at boring MW10A. Approximately four feet of silty and sandy clay were indicated between a depth of 17 and 21 feet at MW10b. Approximately four feet of clay and silty clay were indicated at a depth of 16 feet in borehole for MW10C.

To be consistent with previous reports, the following text has been added to Section 3.2.5.

**"Three borings made during the RI while installing monitoring well MW-10C (MW-10A, MW-10B, and MW-C). Drilling conditions were difficult and the drillers found it difficult to keep an open hole and collect a representative sample from the clay confining layer. These borings indicated clay thicknesses of 3.5 feet, 4.0 feet, and 4.0 feet, respectively. To further investigate, a fourth boring, CB-1 was made in the vicinity of MW-10C and it indicated a clay thickness of 2.5 feet. "**

28. **Page 9, Section 3.2.5; Vertical Gradient Between Upper and Lower Aquifer.**

Explain why the differing clay layer thickness causes the high degree of variability in the calculated downward gradients in the lower aquifer.

**Response:** In this instance, the water level drop between the upper and lower aquifer occurs across the clay confining layer. As explained in the response to Comment 14 above, hydraulic gradients are calculated by dividing the change in water elevation by the distance over which that change occurred. Therefore, the calculated gradient is the quotient of two variables: the numerator (the change in water level) and the denominator (the clay thickness). The gradient will vary in direct

proportion to changes in clay thickness and of course differences in water level. From Table 4 it is apparent that both the water levels and the clay thickness vary from one location to another. As the above explanation makes clear, this variability will result variability in calculated gradients.

However, the key question is: "What is significant about the hydraulic gradients between the upper and lower aquifer?" It is not the variability. Therefore, Section 3.2.5 was included in the report to focus on the significant issue, which is that the vertical gradients are strongly downward between upper and lower aquifer.

Text has been added to Section 3.2.5, summarizing the above discussion.

29. **Page 10, Section 3.2.5; Groundwater Flow System, Vertical Gradient Between Upper and Lower Aquifer.** Indicate what is meant by the "strong" downward gradient. For example, state the actual calculated gradients.

**Response:** The average horizontal gradient in the upper aquifer is on the order of 0.005. The vertical gradient between upper and lower aquifer is about two orders of magnitude greater. Therefore, is reasonable to state that vertical gradients are strong. Text has been added to provide the range of calculated gradients from Table 4.

30. **Page 10, Section 3.3; Indicator Contaminants and Areas of Groundwater Contamination, Identified Sources of Groundwater Contamination.** Remove the portion of the last sentence which begins with "and therefore, have been eliminated as sources of groundwater contamination for areas outside the wall."

**Response:** The last part of the last sentence has been deleted in the revised report as directed by U.S. EPA.

31. **Page 10, Section 3.3; Indicator Contaminants and Areas of Groundwater Contamination, Identified Sources of Groundwater Contamination.** There needs to be some mention of know locations of non-aqueous phase liquids (NAPLs), both light and dense, at and around the site. A figure showing this should be included and referenced here. Also, documentation must be provided to support the figure. Analyze the subsurface topography to determine any likely pathways for the NAPLs. Some of this information was provided to U.S. EPA subsequent to the submittal of the Technical Memorandum and must be included in the revised Technical Memorandum report.



**Response:** Three new figures and a table have been added to the revised report. Figure 7 is a map of the locations where NAPLs have been observed at the site. Figure 8 is a Surfer™ calculated contour plot of the surface of the top of clay. Figure 9 is a C-size showing the top-of-clay elevations at each boring location where clay has been encountered. Table 9 is a listing of coordinates and clay elevation from soil borings. The table and figures are referenced in Sections 3.4 and 3.5 of the revised report.

32. **Page 10, Section 3.3; Identified Sources of Groundwater Contamination.**

Add the following to the text: There is some doubt as to the nature and extent of any non-aqueous phase liquids (NAPLs) that may be on and around the site.

**Response:** A statement has been added that the U.S. EPA has inquired as to the nature and extent of NAPLs. In addition, further clarification and references to the new table and figures have been added.

33. **Page 10, Section 3.3; Identified Sources of Groundwater Contamination.**

Delete the part of the last sentence starting with, and therefore. . . Add the following to the text. It is believed that further off-site migration of contaminants is limited by the barrier wall. There is some doubt as to the longevity of the barrier wall and how long it will continue to perform as an adequate containment mechanism.

**Response:** The last part of the sentence has been deleted as requested. However, it is inappropriate to add a statement disclaiming longevity of the barrier wall. The final construction documentation is being prepared for the barrier wall and it will show that the barrier wall was built to highest standards for permanence and chemical resistance. The construction materials used and QA/QC standards followed were equivalent or in exceedance of those used in the construction of hazardous waste containment cells such as RCRA Subtitle C landfills. Text has been added explaining this and also observing that, like a RCRA landfill, long term monitoring will be conducted to document integrity (Section 3.5 on Page 13).

34. **Page 10, Section 3.3; Identified Sources of Groundwater Contamination.**

The last sentence of this section asserts that the sources of groundwater contamination have been eliminated for areas outside the barrier wall. Provide data to support this assertion. U.S. EPA believes that the potential exists for continuing contamination remains as long as the sources remain. Multiple sources of contamination remain at the Site. Furthermore, there is some doubt as to the nature and extent of any free-phase liquids present.

**Response:** In response to Comment 29 above the last part of last sentence in Section 3.3 has been deleted. In addition, text has been added to Section 3.5, stating that as designed, the barrier wall was constructed outside areas that contain buried waste as it was defined by the Administrative Order.

35. **Page 10, Section 3.4; Indicator Contaminants and Areas of Groundwater Contamination.**

See above general comment regarding the UCLP.  
Delete references throughout the section.

**Response:** References to a statistical approach to data analysis have been removed from the text, as agreed with U.S. EPA in the meetings we had to discuss the groundwater monitoring plan during February and March, 1998.

36. **Page 11, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer, 2nd sentence.**

The frequency of detections as presented may be misleading because the dilutions of some samples (at MW51) for instance can mask lower levels of other organics. Please qualify the statement.

**Response:** Text has been added to state that relatively high concentrations of one or two compounds may mask detections of compounds if those compounds exist at concentrations two or more orders of magnitude lower in concentration.

37. **Page 11, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer, first paragraph.**

Figure 6 is labeled "Spatial and Temporal Variability of Historical VOC and SVOC Detections..." is a figure concisely summarizing the historical variability of these detections is appropriate (and needed to support the argument for using indicator compounds). Unfortunately, this figure does not show temporal variability. It merely summarizes number of detections and gives the "95% UCLP" for each compound detected during the four quarters of baseline monitoring.

**Response:** As agreed in several meetings earlier this year with the Agencies, statistical methods will not be used as "triggers" for monitoring modification. Therefore, Figure 10 (which was Figure 6 in the earlier submittal) has been modified to contain the highest concentration detected of indicator parameters at each monitoring location during the baseline monitoring. The title on the figure has been modified to be consistent with the data in now shows.

No mention has been made of the TICs found in the upper aquifer. It appears that the proposed

monitoring would not monitor the TICs. A summary of TICs is needed.

**Response:** A discussion of TICs has been added to both Section 3.6.1 for the upper aquifer and Section 3.6.2 for the lower aquifer.

38. **Page 11, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer, second paragraph.**

It is stated that analytical results at MW48, MW49, MW13, and MW6 show consistent relatively high concentrations of benzene and chloroethane. While these wells do all show elevated levels, these levels have not been particularly consistent through time. More frequent monitoring than annual will be needed until consistent trends have been established.

**Response:** As requested, the groundwater monitoring plan has been revised to include a schedule for quarterly sampling of monitoring wells MW48 and MW49 (See Table 12).

39. **Page 11, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer, fourth paragraph.**

A hypothesis is presented to explain the changing benzene concentrations at MW48 and MW49 as being due to changes in the flow patterns due to the PGCS; that contaminants are being "pulled" past these two wells. No data or analysis has been presented to support this hypothesis. While, MW49 is located fairly close to the PGCS, MW48 is located perhaps 250 feet from the PGCS. The flow maps do not show gradients sufficient to produce these rapid effects. If there is other evidence to explain the fluctuating levels, it should be presented. These wells in particular require quarterly monitoring until the flow system is stabilized and consistent trends have been established.

**Response:** As requested in Comment 38, the groundwater monitoring plan has been revised to include a schedule for quarterly sampling of monitoring wells MW48 and MW49 (See Table 12).

40. **Page 12, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer.**

Add the following as a bullet point: Elevated levels of Phthalate in groundwater are a health concern. This is the reason that a maximum contaminant level for bis-(2-ethylhexyl) phthalate or di-(2-ethylhexyl) phthalate (DEPH) has been set at 6 ug/L.

**Response:** A bullet has been added to Section 3.6.1. It is in general agreement with the above statement and lists the remediation level at 5.8 ug/L as stated in Appendix B of the Statement of Work.

Also, add the following bullet point: since phthalates have been detected in wells where at times when no benzene or other volatile have been detected, then the volatile will not serve to be an indicator of such.

**Response:** A statement has been added to the text in Section 3.6.1 making the observation that benzene is not an indicator of phthalates at the ACS Site.

41. **Page 13, Section 3.4.1; Upper Aquifer, first full paragraph.**

Remove the word "likely". It is acceptable to replace with wording such as: "it is feasible that some of the phenols may be due to natural causes, produces by the decay of organic matter."

**Response:** The section on the phenol anomaly has been re-written to discuss the results of the sampling tube test and so the sentence referenced above has been deleted.

42. **Page 11, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer, second paragraph.**

When speaking of "relatively" high levels give ranges or orders of magnitude so that it is clear what are the typical concentrations and what is considered a relatively high level.

**Response:** A notation regarding the magnitude of concentration has been added to the text as requested in second paragraph of Section 3.6.1.

43. **Page 12, Section 3.4.1; Indicator Contaminants and Areas of Groundwater Contamination, Upper Aquifer.** Phthalates are contaminants of concern at this site; that is, phthalates are contaminants which are associated with past site activities. Furthermore, phthalate detections continue to be problematic at this site; being detected with distressing frequency. While they can be field/laboratory artifacts, their continuing (though intermittent) persistence argues otherwise. The failure of the phthalate distribution to strongly correlate with the benzene and chloroethane distribution is not persuasive. They may be due to different releases than some of the other compounds. Their degradation potential differs from that of benzene or chloroethane. Consequently the distribution of the phthalate may reasonably differ from that of the

benzene and chloroethane.

No Response is requested by this comment.

44. **Pages 13-14, Section 3.4.2; Indicator Contaminants and Areas of Groundwater Contamination, Lower Aquifer.**

See General Comment #5 above.

See response to general comment #5.

45. **Page 13, Section 3.4.2; Indicator Contaminants and Areas of Groundwater Contamination, Lower Aquifer.** Figure 7 is referred to in this section. Figure 7 is labeled "Spatial and Temporal Variability of Historical VOC and SVOC Detections..." It is a figure concisely summarizing the historical variability of these detections is appropriate (and needed to support the argument for using indicator compounds). Unfortunately, this figure does not show temporal variability. It merely summarizes number of detections and gives the "95% UCLP" for each compound detected during the four quarters of baseline monitoring.

**Response:** In several meetings with the Agencies during February and March to discuss the future groundwater monitoring plan, it was agreed to discontinue the use of statistical triggers. Therefore, the Figure 10 (formerly Figure 7) has been modified to contain the highest concentrations and the number of detections of indicator parameters at each monitoring location. The title on the figure has been modified to be consistent with the data in now shows.

46. **Pages 13-14, Section 3.4.2; Indicator Contaminants and Areas of Groundwater Contamination, Lower Aquifer.**

No mention has been made of the TICs found in the lower aquifer. A summary of TICs is needed.

**Response:** A summary of the TIC detections was provide to U.S. EPA in February. That summary has been included in Section 3.4.2, as requested by U.S. EPA.

47. **Page 15, Section 4.0; Proposed Long Term Monitoring Plan, last paragraph.**

Several objectives for the monitoring plan are listed. It is not clear what is the difference between the first objective ("monitor groundwater flow in the upper and lower aquifers") and the third objective (monitor hydrogeologic conditions (i.e., groundwater flow patterns and horizontal groundwater velocities) in the upper and lower aquifers). Clarification is needed.

**Response:** In the next comment, U.S. EPA provides six additional objectives to include in the text of the monitoring plan. Our response to both this comment and the next is to develop one single set of objectives acceptable to the Agencies and the ACS group by synthesis of the existing comments and the comments suggested below by U.S. EPA. See the response to the next comment.

48. **Page 15, Section 4.0, Proposed long-term groundwater monitoring Plan.**

Add the following objectives:

- to monitor groundwater quality in the upper and lower aquifer at the boundaries of the known extent of contamination to determine whether the contaminant plumes in the upper and lower aquifer are remaining constant, or are shrinking or expanding.
- to monitor groundwater quality in the interior of the plumes to determine how contaminant concentrations change with time and in response to remedial actions.
- to monitor the sources of groundwater contamination to determine any changes and how the sources may affect fate and transport of the contaminants and how the selected remedial action treatment may be affected;
- to continue to monitor how the upper aquifer contamination has affected the lower aquifer;
- to detect changes in concentrations of the sources present. Since there are still sources remaining in place on-site which in some cases have not been clearly defined, we can not make fate and transport predictions with confidence, and hence need to track the concentrations of sources detected;
- to measure water levels in the upper and lower aquifer to monitor water flow directions and vertical and horizontal gradients, and to determine how remedial actions are affecting groundwater flow patterns at the site.

**Response:** Rather than simply append these six objectives to the eight that are already in the text, we recommended editing both groups to provide a single non-repetitive and concise set of objectives equally acceptable to the Agencies and the ACS Group. A set of objectives was developed from the above list and provided to U.S. EPA in May 1998. The final list is included in Section 4.1 on page 20 of the revised

document.

49. **Page 15, Section 4.3; Proposed Long-term Groundwater Monitoring Plan, Sampling Frequency.**

Based upon the homogeneity of the upper and lower aquifers and the low flow velocities, it has been proposed that there be a lower frequency for sampling than quarterly. However, there is enough inconsistency in contaminant levels that annual sampling is not sufficient. It is proposed to sample with a frequency of every third quarter for the first 3 years; annual except with a one quarter seasonal off-set. As was discussed in the recent meetings, there is not a sufficient database for most of the wells in the proposed monitoring program to have documented the presence or absence of seasonal changes. Continued quarterly monitoring would provide the basis to determine any season patterns. If this is not done, the subsequent collection of data on a quarterly off-set schedule would not be useful.

U.S. EPA believes that sampling semiannually may be sufficient (with some specific exceptions--MW48, MW49, and MW9R that will continue to require quarterly sampling of indicator parameters.) One sampling event per year should be for full scan analysis while the other sampling event may be for the short indicator parameters list.

**Response:** Tables 12 and 13 have been developed to specify sampling at specific wells for the future. The table summarizes a semi-annual sampling program that collects groundwater samples during the spring of each year for full scan analysis and collects samples each fall, for analysis of indicator parameters. Three specific wells, MW48, MW49, and MW9R are scheduled for quarterly sampling and indicator parameters, as required by this comment.

It is premature to decide now to further reduce frequency in 4 years. Monitoring objectives will likely change somewhat as the remedy is fully implemented. It must be remembered that the monitoring program under consideration now is the monitoring program pending completion of the remedy, at which time, the monitoring program may need to be modified. However, monitoring shall be required until it is demonstrated, with confidence, that the remediation levels have been achieved.

**Response:** Text has been added to Section 1.0 and 4.1 stating that the groundwater monitoring plan defined therein is an interim monitoring plan for the remediation phase. It is understood, that a long term monitoring plan will be developed to monitor the site groundwater after

the remediation has been completed.

50. **Page 16, Section 4.0, Proposed Long-term Groundwater Monitoring Plan, 5th bullet from top of page.**  
Analysis of indicator parameters alone can not determine if the groundwater cleanup objectives are being met. That is why a full scan will be necessary at least once per year. Indicate this in the text.

**Response:** As required, the text and tables have been revised to indicate that full scan analyses will be conducted once annually at the monitoring wells in the upper and lower aquifer monitoring network and at up to five residential wells (see Section 4.3).

51. **Page 16, Section 4.1.1; Water Level Measurements, Upper Aquifer Gauging Points.**  
While it is not clear whether the proposal presented includes water levels continue to be measured quarterly as part of the groundwater treatment system monitoring. However, U.S. EPA believes it continues to be important and must be included. Reference should be made in this document to the relevant monitoring provisions of the groundwater treatment system monitoring.

**Response:** A new section has been added to the Monitoring Plan (Section 4.2.2) summarizing the water level measurement locations and the analytical sampling locations and parameters that are being conducted for the BWES and PGCS under the Performance Standard Verification Plan (PSVP) for the Site. Section 4.5 commits to sampling the effluent from the PGCS treatment plant

More frequent water level measurements are needed in the upper aquifer than annual until it has been established that the flow system around the barrier wall and PGCS are in steady state. In addition, there is the potential for changing flow conditions due to changes in water management at the landfill. Water levels should be measured quarterly in the upper aquifer synoptically with the water level measurements done for the groundwater treatment system monitoring.

**Response:** Table 11 has been added to the monitoring plan to provide a complete list of all the wells, piezometers, and staff gauges to be measure on a quarterly basis.

52. **Page 17, Section 4.2.1, Groundwater Sampling and Analysis; Monitoring Wells.**  
It is not clear how these areas were defined, for example arbitrarily, geographically, or by some other reason. It is important to know what wells



that have historically exhibited contamination along with those which do not exhibit contamination.

**Response:** There are four specific and discrete areas in which the groundwater has been impacted at the Site. In the upper aquifer, groundwater flow has been radially outward from the firepond. The location of contaminant sources with this groundwater flow has resulted in three specific areas of impact within the upper aquifer. One area extends north from the site toward the drainage ditch. One area extends west into the wetland from ACS facility, and the third area extends to the south-southeast from the Off Site Containment Area. These impacted areas have been called the North, West, and South Areas, respectively. Gradients are very flat just east of the site along Colfax Avenue, so the groundwater flow is very slow, and the contaminant levels are low (less than 20 ug/L). There is no distinct basis for deciding where the north area ends and the south area begins along Colfax, so the line was arbitrarily placed at about the midpoint of the Site.

The only area in the lower aquifer that has consistently shown contamination by compounds with MCLs, is the area directly associated with the faulty casing at monitoring well MW9. Therefore, the fourth area defined in this section is the MW9 impact area.

Figure 10 and 11 were prepared to provide an indication the information requested in this comment, specifically, the compounds that have been detected at each well, the highest detected concentrations of those compounds during the baseline sampling. There is some simplification in this Figure. For wells that have had historically shown groundwater impact by the indicator compounds, there may be some compounds not shown, if they have been detected intermittently and at trace levels (in comparison to the concentrations of the indicator compounds). In addition, time-trend plots have been developed for each well that has had repeated detections of compounds; these are compiled in Appendix b.

53. **Page 17, Section 4.1.2; Groundwater Sampling and Analysis, Lower Aquifer Gauging Points.**

There is a contradiction between the text in this paragraph and the contents of Table 9, Proposed Groundwater Gauging Points. Revise Table 9 and the text to be in agreement. See General Comment #2 above.

**Response:** Table 11 (previously labeled Table 9) and the text have been revised as suggested.

54. **Page 18, Section 4.2.2, Private Wells.**

Explanation for sampling residential wells is too ambiguous. Clarify the procedure in more detail.

**Response:** The text in Section 4.4 has been revised to clarify the ACS Group commitment to collect samples from up to five residential wells annually and to analyze those samples for full scan TCL/TAL

parameters. As in the past, the ACS Group is committed to collect whatever data is technically justified to meet its obligations to the U.S. EPA. Also, in accordance with Comment 20, the reporting of the results will be reported immediately upon completion of analysis by the laboratory.

55. **Page 18, Section 4.2.2; Groundwater Sampling and Analysis, Private Wells.**

The text proposed that no private wells will be routinely monitored. U.S. EPA continues to believe that private wells must be sampled at least on an annual frequency basis and analyzed for "full scan" parameters. Given this concern by U.S. EPA, ACS Order Respondents had subsequently proposed to sample annually the 5 wells within the plume area. U.S. EPA approves of the five wells proposed to be sampled annually. In addition, any other well deemed necessary to be sampled by U.S. EPA shall also be sampled by the Order Respondents. Four weeks prior to the annual sampling event, U.S. EPA will be notified, in writing, that the sampling event will occur; the notice shall request from U.S. EPA the number and locations of residential wells to be sampled. If no response is sent by U.S. EPA within 2 weeks of the monitoring event, then an assumption can be made that only the 5 above-mentioned sampling locations need to be sampled.

**Response:** The ACS Group will give the U.S. EPA four weeks notice of the planned annual collection of samples from five residential wells in the ACS vicinity. If U.S. EPA requests a change in the sampling within two weeks of the event, the ACS Group will consider the technical basis provided by the U.S. EPA. As in the past, the ACS Group is committed to collect whatever data is technically justified to meet its obligations to the U.S. EPA. See Section 4.4 on Page 23 of the revised report.

56. **Page 18, Section 4.2.4; Groundwater Sampling and Analysis, Analytical Parameters.**

Omitted are any indicator parameters for SVOCs. Phenol and phthalates should be included in the indicator parameter list.

**Response:** It is understood that U.S. EPA requires additional data before agreeing to eliminate phenol and phthalates from the list of indicators for groundwater contamination. Therefore, the sampling is scheduled so that a full scan analysis, including phenol and phthalate, will be completed in June 1998, and the results will be available several months in advance of the indicator round (Tables 12 and 13). The current notes on these tables defining the indicator list include phenol and phthalates. If and when sampling results indicate that the phenol and / or phthalates are protocol or lab related rather than Site related, the case will be made to the U.S. EPA with a request to eliminate the anomalous compounds from the indicator list for appropriate wells.

When approved, Tables 12 and 13 will be modified accordingly.

57. **Page 18, Section 4.2.4.1; Groundwater Sampling and Analysis, VOCs.**

It is proposed to include for analysis in the monitoring program only two volatile compounds as "indicator parameters". While these two compounds are the most pervasive volatile compounds detected at the site, the argument has not been adequately made that they are adequate surrogates for all the organics (including TICs and vinyl chloride) at the site. At the meetings, U.S. EPA discussed adding both chloroethane and vinyl chloride as indicator parameters. Subsequently, it has been brought to U.S. EPA's attention by IDEM that chloroethane and vinyl chloride are compounds with relatively high vapor pressures. Due to the sandy lithology from ground level throughout the extent of the depth of the upper aquifer and shallow groundwater throughout the area, volatilization through the unconsolidated material of both compounds is a possibility that must be considered. Given this, it is reasonable to assume that analytical results could be biased low over time and distance. This may preclude the notion that these compounds alone could be relied upon to serve as viable indicator parameters for a long-term monitoring program. Hence, PCE, TCA, TCE, 1,2-DCA have also been added to the list of VOC indicator parameters as well as benzene, chloroethane and vinyl chloride.

**Response:** PCE, TCE, TCA, DCE, VC, chloroethane, benzene, arsenic, and lead are acceptable as indicator parameters for VOCs. As shown on Tables 12 and 13, an indicator sampling event will be conducted during the fall of each year, and will include these compounds.

In addition, all compounds (VOCs, SVOCs, PCBs, and metals) shall be monitored annually.

**Response:** Tables 12 and 13 show that the wells in the upper and lower aquifer monitoring network will be sampled each spring and analyzed for the full scan of TCL/TAL parameters.

58. **Page 19, Section 4.2.4.2; Groundwater Sampling and Analysis, Metals.**

Refer to General Comment #2 above.

To add some detail, the discussion presented in this Technical Memorandum for selecting indicator metals is confusing. There has been no discussion of the meaning or appropriateness of using a "95% UCLP". The requirement of a significant difference in concentration between interior wells and down

gradient and side gradient wells is unacceptable. It is not clear how interior wells are defined; it appears that there is no definition of "interior wells" independent of measured organic contamination levels. This is circular reasoning. Address this or delete it.

**Response:** As agreed in meetings with the Agencies in February and March specifically to discuss the groundwater monitoring plan, the 95% UCLP will not be used to analyze monitoring results. Therefore, the text has been modified by deleting references to statistical methods.

59. **Page 20, Section 4.2.4.2; Groundwater Sampling and Analysis, Metals.**

Arsenic and lead will be adequate indicators for metals in the groundwater monitoring program for the "indicator" round. The other metals would be useful in showing any natural attenuation processes.

**Response:** Arsenic and lead are included as indicators for the groundwater monitoring plan. See the notes on Tables 12 and 13.

60. **Page 20, Section 4.4.1; Sampling and Analytical Procedures, Water Level Measurements.**

EPA believes that water levels should be measured more frequently than every third quarter (annual with season off-set), as proposed in the 1997 Groundwater Report.

Hence, please revise the report to indicate the following: Water levels shall continue to be measured quarterly. This effort should be coordinated with the quarterly monitoring of the groundwater treatment system and barrier wall extraction system; monitoring of P-81 through P-108. Along with measuring water levels at all wells indicated in general comment #2 above, water from the following piezometers/wells must be monitored on a quarterly basis: PZ-42, PZ-43, PZ-44, LW-1, LW-2, P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, P-11, P-12, P-13, P-15, P-16, P-17, P-18, P-22, P-23, P-24, P-25, P-26, P-27, P-28, P-29, P-30, P-31, P-32, P-35, P-36, P-37, P-38, P-39, P-40, P-41, P-46, P-50, P-51, P-52, P-53, P-54, P-55, P-56, P-59, P-60, P-61, P-62, P-63, P-64, P-65, P-66, P-67, P-68, P-69, P-70, P-71, and EW-1. Also, water from the following staff gauges must be monitored on a quarterly basis. SG-2, SG-7, SG-8R. Also inspection of the ditches must be made to determine whether any water is present; these are where the following staff gauges are located SG-1, SG-3, SG-5, SG-6, SG-11, and SG-

12.

**Response:** Table 11 (previously Table 9) in the Proposed Monitoring Plan has been modified to include the above listed well, piezometer and staff gage locations.

61. **Page 20, Section 4.4.2, Sampling and Analytical Procedures, Groundwater Sampling.**

It is proposed that there be no data validation unless "there are indications of groundwater data inconsistencies". This is unacceptable. As was discussed in recent meetings, some level of data validation is needed. While U.S. EPA may consider a reduced level of effort for data validation once sufficient data is available for a particular laboratory, that is not the case here since a new laboratory will be needed (See General Comment #4 above). Hence, full data validation continues to be required.

**Response:** A commitment to conduct data validation of 100 percent of the data for the interim sampling plan period has been added to the text in Section 4.3.3.

62. **Pages 20-21, Section 4.5; Protocol to Revise Monitoring Plan.**

See General Comment #1 above. Revise the Technical Memorandum. The report proposed to determine whether increases in concentration have occurred by comparing it to a "intra well 95% UCLP". The actual trigger proposed using the "intra well 95% UCLP" as the actual trigger has been inadequately explained. While U.S. EPA is not in favor of this comparison, EPA does agree with the concept of a "trigger" level (i.e., a concentration level that exceedence of would trigger an action--additional sampling, monitoring plan modification, implementation of an additional remedial action) is reasonable. U.S. EPA believes that the trigger should be the highest detected level in the well to date. This trigger would be "frozen", and not change over time. If a level exceeds a trigger, then the conditions must be evaluated to determine what actions are necessary. Obviously many of the levels already exceed the remediation levels, so the trigger is not meant to determine when remedial actions are necessary. The Record of Decision controls what remedial actions are necessary. The trigger be the "red flag" that some condition is changing and needs to be evaluated to determine the cause and if it is already addressed.

For wells located outside of the plume, wells in

which no levels over action levels (MCLS or the ROD remediation level, as applicable) have been detected, the "trigger" should be the action level. If there is an exceedance of the action level, this indicates plume expansion and warrants immediate action (additional sampling, monitoring plan modification, implementation of an additional remedial action).

Delete the discussion regarding the interval for re-sampling. The need for resampling or other actions shall be determined once an exceedance is found during a regular sampling event. When the exceedance is confirmed, a response should be proposed within the next 90 days.

The proposal implies that when monitoring for an area indicates levels are either below the remediation level or background, a revised monitoring plan that eliminates the wells in that area will be submitted. To be clear, elimination of wells in an area from the monitoring program must be contingent upon demonstrating that levels of all compounds, not just indicator compounds, are below the remediation level (or background), and by demonstrating that these levels will continue to remain below the remediation level (or background level).

**Response:** As agreed with the Agencies at several meetings during February and March to discuss the groundwater monitoring plan, statistical methods will not be used to establish action triggers for the monitoring. Instead, it was agreed that the trigger level for each well, will be the highest detected concentration of any given contaminant. Furthermore, it was agreed that the response to a trigger event would depend upon the significance of the exceedance, and could range from no action, other than reporting, to additional monitoring or remediation.

Appendix C contains a listing of the maximum concentration of each contaminant analyzed for in each monitoring well during the baseline groundwater sampling at the Site. The results from future sampling rounds will be compared to this list, and any detections that exceed the concentrations listed in the table, will be highlighted. In the analysis section of the groundwater monitoring report, each highlighted value will be evaluated for significance.

The evaluation will take a number of factors into account to determine significance. Factors will include: groundwater flow direction, concentration of the same compound in the well during previous sampling events, concentrations of the same compound at other nearby wells, and magnitude of the exceedance of the trigger. The exceedance will be considered significant if it shows that the area of groundwater contamination is increasing in area or in concentration. Trigger events

will be reported within 90 days of completion of the sample collection, and the report will include a recommendation to the Agencies for action. Actions may range from a limited action such as waiting until the next sampling event for another evaluation, to an actions such as additional sampling, modification of the sampling plan, or implementation of an additional remedial action.

63. **Appendix B; Statistical Methods Summary.**

The summary presented in this appendix is not understandable. See General Comment #2 above.

**Response:** As agreed with the Agencies at several meetings during February and March to discuss the groundwater monitoring plan, statistical methods will not be used to establish action triggers for the monitoring. Therefore, no further explanation has been included in the text or Appendices.

64. **Table 8, Summary of Residential Well Sampling Results, page 1 of 5.**

Explain why no VOA results for ACS-PWY-02 are reported. Include resident name and address in the table.

**Response:**

A sample was collected from 1002 Reder Road at the request of U.S. EPA. The sample designation assigned to this well in the field was ACS-PWY-02 and a duplicate of this sample was collected and designated ACS PWY-92. Due to a laboratory error, the sample ACS PWY-02 was analyzed for multi-concentration VOCs, not the planned low-level detection limits used for the private well samples. By the time the laboratory notified Montgomery Watson of its error, the holding time for the sample had elapsed so the laboratory could not reextract the sample to run low-level detection analysis. Therefore, VOC and VOC TIC data sheets do not exist for ACS-PWY-02. The duplicate sample results ACS-PWY-92 for 1002 Reder Road are included in Appendix G.

65. **Time Trend Plot for MW48.**

Replace typo (MW6) in plot title with the correct well name (MW48).

**Response:** The plot has been corrected as requested.

66. **Appendices D, E, and F.**

Explain why IEA, the approved laboratory, did not analyze the inorganic samples. Discuss why American Environmental was used. This laboratory was never approved, in advance, by U.S. EPA.

**Response:** American Environmental purchased in 1997. While the ownership changed, there was no substantive change to the laboratory, staff, or procedures. The lab continued to follow the approved QAPP. Therefore, the American Environmental label on laboratory packets is

not an indication that the laboratory itself had changed or that the samples were analyzed by a different lab.

67. **Appendix F.** The appendix is missing the inorganic and pesticide/PCB data sheets for sample ACS-PWRE-02, and the VOA and VOA TIC data sheets for sample ACS-PWY-02.

**Response:** The Pesticide/PCB data sheets from ACS-PWRE-02 were inadvertently left out of Appendix F. It seems likely that during reproduction, this data sheet was "grabbed" with the one in front of it and therefore was not copied. The missing information is now included in the revised report.



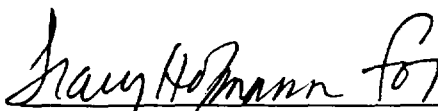
**TECHNICAL MEMORANDUM  
SEPTEMBER 1997 GROUNDWATER SAMPLING  
RESULTS REPORT  
AND GROUNDWATER MONITORING PLAN  
(Revised July 21, 1998)**

**AMERICAN CHEMICAL SERVICE, INC.  
NPL SITE  
GRIFFITH, INDIANA**

**Prepared For:**

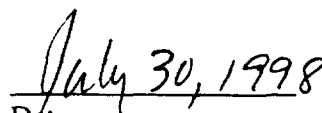
**ACS RD/RA Executive Committee**

Prepared by:

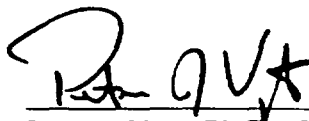


Thomas A. Blair, PE.  
Senior Project Engineer

Date

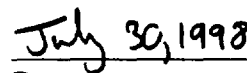


Approved by:



Peter J. Vagt, Ph.D., CPG  
Project Manager

Date



## EXECUTIVE SUMMARY

This Technical Memorandum presents the results of the fourth quarter baseline groundwater sampling event for the American Chemical Service (ACS) NPL Site (Site) in Griffith, Indiana. It also provides a summary of the baseline sampling data in the context of previous sampling results and it includes a proposal for an interim groundwater monitoring plan (during remedial design and remedial action) on the basis of the accumulated data and future requirements.

The fourth sampling event for the baseline groundwater monitoring was initiated on September 22, 1997 with the measurement of water levels at staff gauges, piezometers, and monitoring wells on the ACS Site. During the next two weeks, groundwater samples were collected from 24 upper aquifer and 23 lower aquifer monitoring wells and submitted under standard chain-of-custody for laboratory analyses of the full scan Target Compound List (TCL) organic and Target Analyte List (TAL) parameters. The detected analytes and concentrations were generally consistent with previous sampling results. On October 2, 1997, groundwater samples were collected from five residential wells in the vicinity and submitted for laboratory analysis of TCL/TAL parameters.

Groundwater contour maps were developed for the upper and lower aquifers based on the September 1997 water level data. The interpreted groundwater flow patterns are consistent with flow patterns observed at the Site since the Remedial Investigation in 1991. Historically, the water table has been higher to the east of the ACS facility and lower to the west and south. Prior to construction of the barrier wall, there was a groundwater mound beneath the ACS Site, resulting from infiltration through the unvegetated surface of the ACS facility and from the ACS fire pond. The resulting mound created a hydraulic barrier that prevented east-to-west groundwater flow beneath the Site, and caused the groundwater to flow north and south from a divide just east of Colfax Avenue; northward flow was directed around the ACS facility and southward flow was toward an area southeast of the Site with lower water table levels.

There has been little change in the regional groundwater flow following completion of the barrier wall and perimeter groundwater containment system (PGCS) at the ACS Site. These two remedial projects, completed in June and July 1997, only resulted in small localized changes in groundwater direction and velocity in the upper aquifer, mostly related to the 1500 foot groundwater extraction trench that is integral to the PGCS. The water table map developed from the September 1997 water level data shows that groundwater flow is still from east to west, with flow being diverted north around the ACS facility and to the south. The hydraulic barrier formerly caused by surface water infiltration on the ACS Site, has been replaced by the barrier wall. There is no observable change in the groundwater flow pattern in the lower aquifer resulting from the remedial construction. The lower aquifer potentiometric map developed from the September 1997 water level data indicates that, just as in the past, groundwater flow is from south to north in the lower sand aquifer beneath the ACS NPL Site.

Four primary areas of buried waste have been identified as sources of groundwater contamination at and around the Site: the On-Site Containment Area, the Still Bottoms Area, the Off-Site Containment Area, and the Kapica-Pazmey Drum Recycling Area. Previous sampling, beginning in 1989 for the Remedial Investigation, has indicated that groundwater contamination extends southeast from the Off-Site Containment Area and north and west from the ACS facility in the upper aquifer. Monitoring wells installed in 1996 have delineated the outer extent of groundwater impacts in each area. Benzene and chloroethane are the predominant groundwater contaminants.

The only observed lower aquifer impact has been related to monitoring well MW9, which was installed in 1990 just west of the ACS facility. Soon after installation, chloroethane was detected in MW9, and then in 1995, benzene was detected in a sample from the well. A dye tracer test conducted during 1997 indicated that there is a leak between the upper and lower aquifers at MW9, probably along the well casing. MW9 was abandoned in February 1998 and replaced by MW9R constructed ten feet north (downgradient) from the MW9 location. Future sampling of the replacement well will be used to evaluate the effectiveness of the abandonment and the magnitude of the residual impact from the leakage. Ether, a volatile organic TIC (tentatively identified compound), has been detected in several lower aquifer wells located northwest of the ACS facility. Ether has been detected at a concentration of 12,000 ug/L at monitoring well MW51.

Residential wells were sampled during the remedial investigation and during 1996 and 1997. In some sampling events there were occasional traces of VOCs reported in several samples, upgradient from the Site and to the far east of the Site. None of the detections exceeded levels of concern, such as MCLs.

Construction of the PGCS and the barrier wall has isolated the primary sources of groundwater contamination. Groundwater monitoring of the upper and lower aquifers will be required at and around the Site. Section 4 of this Technical Memorandum details an Interim Monitoring Plan to be conducted during the next few years during remedial design and construction. The monitoring plan addresses: 1) sampling locations, 2) sampling parameters, 3) sampling frequency and 4), a protocol to modify the sampling or take other action, if necessary.

The upper aquifer network of monitoring wells will monitor groundwater quality in three areas of groundwater contamination identified in the upper aquifer: one to the north, one to the west, and the other to the southeast of the ACS NPL Site. Perimeter and internal monitoring wells have been defined for each of these areas. Future monitoring at these locations will allow the boundaries of groundwater impacts to be closely monitored..and provide early warning if it may be expanding. Internal wells have been identified in the north and southeast areas. Results of periodic samples from these wells will provide an indication of the performance of the PGCS and barrier wall, show changes in groundwater quality over time, and provide a warning if groundwater impacts are becoming more significant.

The lower aquifer monitoring network wells will be used to: 1) document background groundwater quality, 2) monitor the behavior of the area of contamination associated with groundwater leakage between the upper and lower aquifer at MW9, and 3), monitor the point of compliance at the downgradient boundary (north side) of the Site.

Groundwater monitoring will be conducted on a semi-annual basis as remedial design and remedial action proceed. The upper and lower aquifer network will be sampled and analyzed for full scan TCL/TAL each spring. The second annual sampling event will be conducted each fall, with the samples analyzed for indicator parameters: PCE, TCE, TCA, DCE, 1,2-DCA, VC, chloroethane, benzene phenol, phthalates, arsenic, and lead. Because of recent fluctuations in the concentrations of VOCs at upper aquifer wells MW48 and MW49 and because MW9R is a new well, these will be sampled on a quarterly basis and analyzed for indicator parameters. In addition, the water levels will be measured at the level monitoring network locations, analyzed, and reported on a quarterly basis.

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## 1.0 INTRODUCTION

This Technical Memorandum provides a summary of the Baseline Groundwater sampling conducted at the American Chemical Service (ACS) NPL Site (Site) in Griffith, Indiana during 1996 and 1997. The baseline sampling consisted of four consecutive quarterly sampling rounds of groundwater monitoring at approximately 48 monitoring wells. These rounds included samples collected at the monitoring network wells in: 1) March, August, and November 1996, 2) April and March 1997, 3) June 1997, and 4) September 1997. The monitoring included: the measurement of water levels at monitoring wells, piezometers and staff gauges; the measurement of field parameters, and the collection and submittal of water samples for analysis of Target Compound List (TCL) organic and Target Analyte List (TAL) inorganic parameters.

The remainder of this Technical Memorandum includes three sections: Section 2 provides a listing of the September 1997 sampling event, Section 3 presents a summary and evaluation of the four quarterly events of Baseline Sampling, and Section 4 presents a proposed interim groundwater monitoring plan to be in effect during the remedial design and remedial action phases at the Site. In addition, many of the monitoring wells were sampled four or five times prior the baseline sampling, including sampling during and following the remedial investigation.



## **2.0 SEPTEMBER 1997 SAMPLING**

### **2.1 PURPOSE AND SCOPE**

The fourth round of the Baseline Groundwater Sampling Program, conducted in September 1997, consisted of measuring water levels and collecting groundwater samples.

- Water levels were measured at staff gauges and upper and lower aquifer wells and piezometers on September 22, 1997.
- Groundwater samples were collected from 24 monitoring wells screened in the upper aquifer and 23 monitoring wells screened in the lower aquifer during the weeks of September 22, 1997 and September 29, 1997 and analyzed for TCL/TAL parameters.

In addition, and at the request of U.S. EPA, water samples were collected at five nearby residences and analyzed for full scan TCL/TAL parameters.

As defined in the October 1996 Phase 2 Upper Aquifer Technical Memorandum (revised June 1997), the objectives of monitoring the upper aquifer are to:

- Monitor groundwater quality at the boundaries of the known extent of contamination to determine whether the contaminant plume in the upper aquifer is stable or expanding.
- Measure water levels in the upper aquifer to determine how remedial actions affect groundwater flow patterns at the Site.
- Monitor groundwater quality in the plume interior to determine how contaminant concentrations change in response to remedial actions.

The objectives of monitoring of the lower aquifer (listed in the September 1996 Lower Aquifer Investigation Report (revised June 1997)), are to:

- Verify the historic northerly horizontal groundwater gradient;
- Monitor the effect of the remedial actions consisting of the barrier wall, the northside perimeter groundwater containment system and other remedial actions at and around the Site, on groundwater flow patterns; and
- Monitor for the presence of contaminants, if any, that may migrate from the upper aquifer to the lower aquifer.

Monitoring well locations and sampling parameters for the September 1997 upper aquifer monitoring activities are described in the Phase II Upper Aquifer Investigation Technical Memorandum, revised June 1997. Well locations and sampling parameters for the September 1997 lower aquifer monitoring activities are described in the Lower Aquifer Investigation Report Technical Memorandum, revised June 1997.

As in previous sampling events, the September sampling was conducted in accordance with U.S. EPA-approved Specific Operating Procedures (SOPs), and the approved Quality Assurance Project Plan (QAPP).

## **2.2 WATER LEVELS**

Water levels were measured at the monitoring wells, piezometers, and staff gauges on September 22, 1997. Three additional sets of paired piezometers (P101-P106) were installed on September 25, 1997. These piezometer pairs were installed to complete the level monitoring system for the barrier wall built around the waste areas at the Site during 1997. In addition, piezometers P1, P20, P40, P41, and P49, which were damaged during barrier wall construction, were replaced. The new piezometers were surveyed, but because they were installed after the September 22, 1997 gauging event, these piezometers are not included in the tables and figures accompanying this Technical Memorandum.

### **2.2.1 Plots of Water Table and Lower Aquifer Potentiometric Surface**

Water level measurements are presented in Table 1, which also includes map coordinates (reference points), top of inside the well casing elevations, and calculated groundwater elevations for the measurement points. Figure 1 is a water table contour map prepared from the calculated groundwater elevations (plotted adjacent to the well, piezometer, and staff gauge symbol). Figure 2 is a water table contour plot for November 1996 before the barrier wall and perimeter groundwater containment system were constructed. Figure 3 shows the potentiometric surface for the lower aquifer based on the groundwater elevations at the uppermost well at each lower aquifer well nest (calculated groundwater elevations are plotted adjacent to well and piezometer symbols).

### **2.2.2 Vertical Gradients Calculated for the Upper and Lower Aquifers**

Vertical gradients were calculated for both the upper and lower aquifers on the basis of water level measurement data from adjacent wells and piezometers screened at different depths in each aquifer.

A summary of vertical hydraulic gradients calculated for nested piezometers in the wetland area is presented in Table 2. Vertical gradients were calculated by dividing the difference in head between nested piezometers by the distance between the screen midpoints. (Piezometers screened at the base of the upper aquifer have screens that are two feet long. Piezometers placed to measure the water table are constructed with ten-foot long screens placed to intersect the water table. Therefore, the distance between screen midpoints is an accurate representation of the screen separation, and is appropriate for making the vertical

gradient calculation). Vertical gradients in the wetland area appear to be upward, but low in magnitude.

Vertical gradients calculated for nested wells screened within the lower aquifer during the September 1997 water level monitoring event are presented in Table 3. The gradients were calculated by dividing the difference in head between nested wells by the distance between the bottom of the upper screen and the top of the lower screen at each well location. These reference points were selected rather than screen centers in order to provide the most accurate vertical gradient calculations. Most of the lower aquifer wells have ten foot long screens, the differences in water levels at adjacent lower aquifer wells are generally quite small (most less than 0.02 feet), and the vertical separation between screens is 20 feet or less in most cases. In order to avoid biasing the calculated gradients low, it was appropriate to use the bottom and top of adjacent well screens rather than screen centers.

Four of the gradients calculated between upper, middle, and lower zones were downward, two were upward, and four were within the margin of potential error in the water level measurements. The largest downward gradient was calculated for MW8/MW31, where a difference of one foot was recorded between MW8 and MW31. This is clearly a measurement error at MW8, since previously, MW8 and MW31 have shown water elevations that are within several hundredths of a foot of each other. The error was not discovered until the actual groundwater elevations were calculated from the water depth measurements. Since the calculation was made several days after measurement, it was too late to collect another contemporaneous, accurate measurement. The largest upward gradient was observed at the MW29/MW34/MW9 well nest, where an upward gradient of 0.0013 was calculated between wells MW29 and MW34. Where gradients are measurable, there seems to be a general downward gradient from the upper to the middle part of the lower aquifer and an upward gradient from the bottom to the middle of the lower aquifer. As a result, there is little overall gradient between the top and bottom of the lower aquifer.

### **2.2.3 Calculated Vertical Gradients Between the Upper and Lower Aquifers**

Calculated vertical gradients between wells screened in the upper aquifer and lower aquifer are presented in Table 4. In general head levels are more than ten feet higher in the upper aquifer than in the lower aquifer. It is clear that the water level drop occurs across the clay layer between the upper and lower aquifer rather than across the entire distance between well screens in the upper and lower aquifer. Therefore, vertical gradients were calculated by dividing the difference in head between the upper and lower aquifer wells by the thickness of the clay confining layer between the two wells. Strong downward vertical gradients ranged from -0.37 calculated between MW17 and MW28 to -0.82 between P27 and MW9.

## **2.3 GROUNDWATER SAMPLING**

Prior to sampling, monitoring wells were purged using low-flow methods in accordance with the approved Monitoring Well Sampling SOP for the Upper Aquifer Investigation (revision: March 21, 1997). Field parameters, pH, specific conductivity, temperature, and turbidity, were measured and recorded during well purging activities (Table 5).

### **2.3.1 Upper Aquifer Analytical Results**

Laboratory analytical reports for VOC, SVOC, PCB, and inorganic compound analyses of samples from upper aquifer monitoring wells are compiled in Appendix D. Compounds detected in samples are summarized in Table 6. The detections of primary contaminants of concern (as identified in previous sampling rounds) are summarized for each upper aquifer well on Figure 4. The results are consistent with previous sampling data and are discussed in the context of all four quarters of baseline sampling in Section 3. Appendix C contains time trend plots for benzene and chloroethane in upper wells and also a listing of all analytical detections in each upper aquifer well.

### **2.3.2 Lower Aquifer Analytical Results**

Laboratory analytical reports for VOC, SVOC, PCB, and inorganic compound analyses of samples from the lower aquifer monitoring wells are compiled in Appendix E. Compounds detected in samples are summarized in Table 7 for each lower aquifer well and shown on Figure 5. The results of the sampling are consistent with previous results and are discussed in the context of all four quarters of baseline sampling in Section 3. Appendix C contains time trend plots for benzene and chloroethane in lower wells and also a listing of all analytical detections in each lower aquifer well.

Monitoring Well MW9 is a lower aquifer monitoring well that has a history of groundwater contamination. The well was installed in March 1990 using a double casing method. Within six months, low levels of chloroethane were detected in samples collected from the well. Benzene was detected in a sample from the well in January 1995 and chloroethane and benzene have been detected at generally increasing concentrations in samples since that time. Although a review of the construction report for the well did not provide any indication of irregularities in the well construction, the sudden appearance and quick increase in concentrations seemed to suggest that the benzene and chloroethane were migrating down the well casing rather than coming from some other more diffuse or distant source.

Therefore, Montgomery Watson developed a tracer test procedure to evaluate whether or not groundwater was migrating from the upper to lower aquifer in the immediate vicinity of MW9. After U.S. EPA approved the procedure, the tracer test was conducted. Dye and ionic tracers were injected in the upper aquifer in the vicinity of MW9. After 60 days, the dye tracer was detected in groundwater taken from MW9, confirming that there is a leak between the upper and lower aquifers at this location, probably along the well casing. Following the U.S. EPA approved plan, MW9 was abandoned in February 1998 and replaced by MW9R, located approximately ten feet north (downgradient) from the original

MW9 location. The results of future sampling of the new well and MW10C, which is downgradient, will be used to evaluate the effectiveness of the abandonment.

## 2.4 RESIDENTIAL WELL SAMPLING

Samples were collected at 18 residential wells in March 1997. The samples were analyzed for full scan TCL/TAL compounds. Trace levels of VOCs were detected in several of the wells, but none of the detections was above an MCL. Wells at the following five addresses were re-sampled concurrent with the September 1997 groundwater sampling event: 938 South Arbogast, 1014 South Arbogast, 1033 Reder Road, 1130 Reder Road (two houses served by the same well), and 430 East Avenue H.

The sample to be collected from 938 S. Arbogast was not collected because this address had previously been connected to the City of Griffith water and sewer utilities. Therefore, U.S. EPA instructed Montgomery Watson to collect a sample from 1002 Reder Rd. The sample designation assigned to this well in the field was ACS-PWY-02 and a duplicate of this sample was collected and designated ACS-PWY-92. Due to a laboratory error, the sample from ACS-PWY-02 was analyzed for multi-concentration VOCs, not the required low-level detection limits used for the private well samples. By the time the laboratory notified Montgomery Watson of this mistake, the sample was beyond the allowable holding time, and the laboratory could not re-extract the sample to run low-level detection limit VOCs. Therefore, the VOC and VOC TIC data sheets for ACS-PWY-02 are not available. However, because sample ACS-PWY92-02 was a duplicate of ACS-PWY-02, low-level detection limit VOCs and VOC TICs are available from 1002 Reder Rd., and are included in Appendix F.

<u>Sample Identifier</u>	<u>Address</u>
PWY-02	1002 Reder Road
PWD-02	1033 Reder Road
PWRC-02	1130 Reder Road (Center House)
PWRE-02	1130 Reder Road (East House)
PWK-02	1014 South Arbogast
PWZ-02	430 East Avenue H

The locations of the residential wells east and south of the Site are shown on Figure 6. Each residential well sample was analyzed for TCL and TAL parameters using low detection limit analytical methods. The sampling results are tabulated in Appendix F and the analytical detections are summarized in Table 8.

The September 1997 sampling results (the sampling date was actually October 2, 1997) were similar to the March 1997 sampling. In sample from residential well PWK, TCE was detected at 0.3 parts per billion in March and at 0.2 parts per billion in September. PWK is screened in the lower aquifer, upgradient (south of the Site) and outside the footprint of the upper aquifer impacted groundwater. The samples from PWRE and PWRC again showed

trace levels of VOCs, as they did in the March sampling. However, in March the detected VOCs were 2-butanone detected at 3 parts per billion and vinyl chloride detected at 0.3 and 0.2 parts per billion. In the samples collected in September, only one VOC was detected: methylene chloride at 0.2 parts billion.

### **3.0 EVALUATION OF BASELINE SAMPLING DATA**

#### **3.1 SUMMARY OF AVAILABLE GROUNDWATER DATA**

The Remedial Investigation for the ACS NPL Site was initiated in 1988. Since that time 28 upper aquifer and 25 lower aquifer monitoring wells have been installed and sampled numerous times. In addition, more than 100 upper aquifer piezometers, three lower aquifer piezometers, and 12 surface water staff gauges have been installed and used to develop groundwater elevation maps on numerous occasions. Water levels and samples from these points have been used to complete a number of hydrogeologic evaluations starting with the Hydrogeologic Technical Memorandum and continuing with the Remedial Investigation Report and subsequent monitoring reports. The following evaluation of the groundwater flow system, aquifer geochemistry, and contaminant distributions is based on previous reports and the Baseline Groundwater monitoring conducted in 1996 and 1997.

#### **3.2 GROUNDWATER FLOW SYSTEM**

##### **3.2.1 Groundwater Flow in the Upper Aquifer**

Following the collection of water level information in June 1997, two remedial construction projects have been completed: the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall and Extraction System (BWES). The effect of these structures on the upper aquifer groundwater flow system is evident in comparing Figures 1 and 2. Figure 2 illustrates the water table configuration prior to construction and Figure 1 illustrates the water table configuration after construction. Comparison of the contour patterns on these two figures indicates that changes have occurred locally in the flow pattern, but that the general regional groundwater flow paths are unchanged.

The highest groundwater levels in the upper aquifer (other than inside the barrier wall) are located east of the ACS facility as indicated by MW18 and P60 (Figure 1). These high water levels suggest the presence of a groundwater mound approximately along Reder Road. Groundwater flows to the north and south from this mound. The lowest groundwater elevations are to the west and south of the ACS facility. To the west, the groundwater sinks are the drainage ditch between SG11, SG5, SG6 and SG3, and the Griffith Landfill leachate collection system (shown by SG2 and P22). The water table is also lower to the south at locations such as MW43 and MW44. In general, groundwater flow in the vicinity of the Site is from the groundwater mound along Reder road, toward the groundwater lows in the west and south. In addition, the collection trench for the PGCS is a groundwater sink to the northwest and west of the ACS facility, as shown by the water table depression between P82 and P91.

The barrier wall prevents groundwater flow directly to the west from Colfax Avenue. Groundwater flows both north and south from the Reder Road mound. The flow to the north curves around the north end of the barrier wall and is collected in the PGCS

extraction trench (P83) or discharged to the drainage ditch (just beyond MW48). Groundwater also flows south from the Reder Road mound toward the south/southwest.

The effect of the PGCS extraction system and effluent discharge is evident in the wetland to the west of the ACS facility. The 629 and 630 contour lines west of the ACS facility illustrate this effect. The 629 foot elevation contour line wraps around most of the PGCS extraction trench due to lower water levels at P91, P88, and P85. A few hundred feet further to the west, the 630 foot contour line outlines a local groundwater high caused by treated water discharges into the wetlands from the PGCS.

While the barrier wall now prevents groundwater flow west across Colfax Avenue, westerly flow across Colfax Avenue was previously limited by a hydraulic barrier. Figure 2 (the November 1996 water table plot) shows similar general groundwater flow from east of Colfax toward the groundwater lows at the drainage ditch, the landfill leachate collection system or the far south part of the Site. Prior to construction of the barrier wall, surface water infiltration to the water table on the ACS Site and through the ACS facility fire pond (shown by SG7) caused a groundwater high near the center of the Site, resulting in radial groundwater flow from the ACS Site, and a hydraulic barrier to westerly flow across Colfax Avenue.

The upper aquifer matrix is a homogeneous silty sand with no evidence of interlayering or bedding complexities. Since the water table maps are based on water levels collected at 12 staff gauges, 28 wells, and more than 100 piezometers, very little interpolation has been required to develop detailed contour plots. All water table maps developed for the ACS Site since the remedial investigation in 1991 have consistently shown the same general groundwater flow patterns. While the contour lines defining the water table are curved, they clearly show consistent groundwater flow pathways from recharge to discharge areas. The average calculated groundwater flow velocity in the upper aquifer is on the order of 50 feet per year, but the rate probably ranges from a minimum rate of less than 10 feet per year to greater than 200 feet per year. The only locations where the groundwater velocity may exceed 100 feet per year are in the vicinity of the PGCS extraction trench and the Griffith Landfill leachate collection system. (Detailed groundwater velocity calculations, based on the RI aquifer tests and the pumping test conducted in March 1995, are summarized in Appendix A.)

Because of the homogeneity of the upper aquifer, the total number of staff gauges, wells, and piezometers can be reduced for future monitoring events. The level measurement locations necessary to develop accurate water table maps are presented in Section 4.2.1.

### **3.2.2 Vertical Gradients in the Upper Aquifer**

Due to the presence of elevated levels of benzene at the base of the upper aquifer relative to that of the surface of the upper aquifer which was determined during the tracer investigation, U.S. EPA was concerned that there might be downward gradients in the upper aquifer in the wetland, and so required the installation of four sets of nested piezometers in the wetland to the west of the ACS facility. Table 2 shows the upper aquifer vertical gradient calculations based on the September 1997 water level measurements. The



vertical gradients recorded at each of the four nested piezometer locations for the past five quarters are tabulated below.

Piezometer Nest	August 1996	November 1996	March 1997	June 1997	September 1997
P64/P65	0.009	0.000	0.016	-0.062	0.022
P66/P67	0.005	0.005	-0.003	0.013	0.007
P68/P69	0.000	0.000	0.010	0.002	0.003
P70/P71	-0.020	0.006	0.030	0.042	0.035

Out of the 20 vertical gradients calculated from these four dual piezometer locations in the upper aquifer in the wetland, three were downward, three were zero, and 14 gradients were upward. From these accumulated data, it is apparent that the general vertical gradients are upward, which is the typical occurrence in a wetland area where groundwater discharges to the surface.

### 3.2.3 Groundwater Flow in the Lower Aquifer

Water levels were measured at staff gauges and the lower aquifer monitoring wells and piezometers on September 22, 1997. The measurements are recorded in Table 1 which also includes the map coordinates and the calculated water elevation for each measurement point. Figure 3 is a plot of the potentiometric surface for the lower aquifer based on the water levels measured at the uppermost well at each lower aquifer well nest. The calculated water elevations are plotted adjacent to the well, piezometer, or staff gauge symbol.

Consistent with the historical groundwater data, the groundwater flow in the lower aquifer is essentially northward. The horizontal hydraulic gradient in the lower aquifer was calculated using the measured difference in head between MW22, located in the southern portion of the Site, and MW10, located at the northern Site boundary. This difference, 1.0 foot on September 22, 1997, was then divided by the lateral distance between the two wells (2,850 feet). Based on this calculation, the horizontal hydraulic gradient in the lower aquifer is 0.00035. As illustrated in the following table, the September 22, 1997 lower aquifer horizontal hydraulic gradient is consistent with previously calculated gradients.

Report of Hydraulic Gradient in Lower Aquifer	Horizontal Hydraulic Gradient
Remedial Investigation Report (June 1991)	0.0006
Technical Memorandum (October 1995)	0.00041
Lower Aquifer Tech Memo (September 1996)	0.00047
Groundwater Monitoring Report (August 1996)	0.00047
Groundwater Monitoring Report (November 1996)	0.00049
Groundwater Monitoring Report (March 1997)	0.00040
Groundwater Monitoring Report (June 1997)	0.00044
This Groundwater Monitoring Report	0.00035

These accumulated data show a relatively low horizontal hydraulic gradient in the lower aquifer that may be decreasing with time. The lower aquifer is homogeneous like the upper aquifer. It also consists of sand, although it contains more gravel than the upper aquifer.

Potentiometric maps developed since the remedial investigation in 1991 have shown a consistent gradient from south to north. Based on these hydraulic gradients and the hydraulic conductivity values calculated from slug test results during the RI, the groundwater flow rate in the lower aquifer is on the order of 50 feet per year. (Appendix A contains the lower aquifer groundwater velocity calculations.) If the hydraulic gradient is decreasing, the groundwater velocity would be decreasing proportionately.

### 3.2.4 Vertical Gradients in the Lower Aquifer

Seven nested well sets have been installed in the lower aquifer. At each location, there are two or three monitoring wells and/or piezometers, each screened at a different depth within the lower aquifer. The water levels recorded for each of these wells are summarized in Table 1 and were used to calculate vertical hydraulic gradients between well screen intervals and the top and bottom of the lower aquifer at each location. Table 3 summarizes these calculated vertical gradients. Vertical gradients in the lower aquifer have been similarly calculated for each of the past five quarters. Tabulated below are the vertical gradients calculated between the top and bottom of the lower aquifer during that time period.

Well/Piezo Nest	August 1996	November 1996	March 1997	June 1997	September 1997
MW7/MW36	0.0	0.0004	-0.0006	-0.0010	0.0
MW8/MW32	0.0002	0.0002	0.0	0.0	NA
MW9/MW34	-0.0002	-0.0002	0.0005	0.0	0.0
MW51/MW33	NA	-0.0004	0.0	0.0	0.0
MW28/PZ43	-0.0006	0.0028	0.0	0.0	0.0
MW52/MW53	NA	NA	-0.0008	-0.0004	-0.0004
MW54/MW55	NA	NA	0.0008	0.0	0.0

#### Note

Value of "0.0" indicates that the vertical gradient was not measurable.

NA = A water level necessary for the calculation was not available

From a review of the accumulated data between August 1996 and September 1997, it is apparent that there are not consistent or significant vertical gradients across the lower aquifer. The water level measurement locations necessary to develop accurate lower aquifer potentiometric maps are presented in Section 4.1.2.

### 3.2.5 Vertical Gradient Between Upper and Lower Aquifer

The average groundwater elevations in the upper and lower aquifers are approximately 632 and 621 feet amsl, respectively. The confining clay layer between the upper and lower aquifer varies in thickness from greater than 30 feet to the south to less than 5 feet in the wetland to the northwest (MW-10C area). Three borings were advanced during the RI while installing monitoring well MW-10C (MW-10A, MW-10B, and MW-C). Drilling conditions were difficult and the drillers found it difficult to keep an open hole and collect a representative sample from the clay confining layer. These borings indicated clay thicknesses of 3.5 feet, 4.0 feet, and 4.0 feet, respectively. To further investigate, a fourth

boring, CB-1 was made in the vicinity of MW-10C and it indicated a clay thickness of 2.5 feet.

Vertical gradients were calculated between the upper and lower aquifer at four locations where there are nearby wells screened in both aquifers. The results are summarized in Table 4, showing strong downward vertical gradients. The vertical gradients are calculated by dividing the difference in water levels by the thickness of the clay layer. The gradient values range from -0.37 calculated between MW17 and MW28 to -0.82 between P27 and MW9. However, the water level is consistently 8 to 12 feet higher in the upper aquifer, as compared to the water level in the lower aquifer. Therefore, while the calculated downward gradients show a high degree of variability, that variability is primarily due to the differing clay confining layer thickness.

### **3.3 IDENTIFIED SOURCES OF GROUNDWATER CONTAMINATION**

The source areas for the groundwater contamination are located in the upper aquifer at the ACS Site. Prior to the Remedial Investigation, a number of sources were identified within the ACS facility (On-Site Area) and the "Off-Site" area as they were labeled. Further investigations have defined the vertical and horizontal extent of buried waste.

From its incorporation in 1955 until 1990, ACS's primary business was reclaiming spent solvents from a variety of users. The general process was to accept spent hydrocarbon solvents in drums or tanker trucks, distill them and either sell or return the reclaimed product to the user. Between 1955 and 1975, the still bottoms and residues were buried within the ACS NPL Site. In addition, any uncontained spills of spent or reclaimed solvents would have remained on the Site. The following areas have been identified by Site investigations as containing organic contaminants:

- Within the Operating ACS Facility
  - Treatment Lagoon #1
  - Still Bottoms Area
  - On-Site Containment Area
- In the Off-Site Area
  - Off-Site Containment Area
  - Kapica-Pazmey Area

### **3.4 SUMMARY OF NAPL OBSERVATIONS**

During investigations at the ACS NPL Site over the past ten years, non-aqueous phase liquids (NAPLs) have been observed at several locations and U.S. EPA has inquired as to the nature and extent. The locations where NAPLs have been observed are now enclosed within the barrier wall. Four areas labeled A, B, C, and D that appear to contain persistent indications of NAPLs are plotted on Figure 7.

#### **Area A – Area West of the Fire Pond**

During the Remedial Investigation (RI), floating NAPLs were observed in piezometer P-37. The piezometer was destroyed in the interim between the RI and pre-design investigation and was not replaced. However, the NAPLs were found in the piezometer at each measurement event before the piezometer was destroyed.

#### **Area B – Still Bottoms Pond**

During the RI, floating NAPL was observed in several soil borings in the vicinity of the closed Still Bottoms Pond.

#### **Area C – Area South of ACS Rail Spur**

Borings were made from ground surface to the confining clay layer along the proposed and final barrier wall alignment during the Dewatering Barrier Wall Alignment Investigation in February 1996. Samples were field evaluated for the presence of oil with hydrophobic dye tests. In the area between the ACS rail spur and the ACS rail tracks, a thin layer of oily soil (less than 1 inch thick) was detected at the base of the upper aquifer and the top of the confining clay at several boring locations in the area labeled C. No layer was observed in any of the perimeter borings.

#### **Area D – Off-Site Containment Area**

A number of test pits were excavated during the Pretreatment / Materials Handling Treatability Study in July 1997. Floating NAPLs were observed on the water table in Test Pits SA-01, SA-02, and SA-04. These are inside the area marked D on the attached map.

#### **Miscellaneous Observations of NAPL**

Figure 7 shows four piezometers where floating NAPLs have been detected. As mentioned above, P-37 contained NAPL each time the water level was measured. Three other piezometers (P-12, P-29, and P-35) which had not previously been found to contain NAPLs, did show an indication of floating NAPL during the September 1997 groundwater monitoring event. (The water level probe had an oily sheen after measurement). These are locations where the water table has been depressed by operation of the barrier wall extraction system (BWES). It is possible that this depression has caused the accumulation of NAPLs. All locations are inside the barrier wall.

### **3.5 ELEVATIONS OF THE TOP OF THE CLAY CONFINING LAYER**

U.S. EPA has inquired as to the nature and extent of NAPLs that may be on and around the Site. Where there are DNAPLs, there is the concern that they may seep to the bottom of the aquifer containing them and then flow by gravity along low areas. Several figures have been developed to evaluate the surface contours and elevation of the top of the clay layer, and evaluate the potential that there might be preferential DNAPL flow paths. The 140 soil borings made at the Site which have made contact with the clay layer are collated on Table 9. The values on this table were used with Surfer™ contouring software to develop an

interpolated "Top of Clay" surface contour map (Figure 8). The individual boring locations and top of clay elevations are plotted on Figure 9.

One of the objectives of the Dewatering / Barrier Wall Alignment Investigation, conducted early in 1996, was to select an alignment for the barrier wall that would be outside the buried waste, as defined by the ROD and potential NAPL areas. Fifty-two borings were made in the On-Site Area and 29 borings were made in the Off-Site Area during the investigation. Each of the boreholes was advanced to the depth at which it encountered the clay layer, and continuous split spoon samples were collected at each location. Each split spoon sample was visually inspected for evidence of contamination, and samples at the aquifer clay interface were evaluated for the presence of DNAPL by using an oil-indicating field screening dye. No evidence was found of DNAPLs or LNAPLs in any of the borings located along the final alignment of the barrier wall.

Observation of the top-of-clay elevations on Figure 9 and examination of the contour plot in Figure 8 show that the top of clay elevation varies about the elevation 620 feet amsl. It appears that there may be a slight upward slope to the clay surface going from the ACS facility, south toward the landfill. The top of clay beneath the active ACS facility and On-Site Containment Area appears to be about 619 feet amsl. In the Off-Site Containment Area, the average top of clay elevation is 620 feet amsl, and at the Kapica-Pazmey Area, it is about 621 feet amsl. There is no evidence of channeling or a low area that might have resulted in gravity flow from the internal contaminant source areas, to an area now outside the barrier wall.

Prior to construction of the barrier wall in 1997, it is likely that the areas of buried waste and perhaps the areas containing NAPLs were the source of groundwater contamination. However, Figure 10 shows that these areas are now contained inside the Barrier Wall. The barrier wall is built to the highest current industry standards for permanence and chemical resistance. The construction materials used and QA/QC standards followed were equivalent to or in excess of those used in the construction of hazardous waste containment cells such as RCRA Subtitle C landfills. However, since waste materials remain buried inside the barrier wall, there will be long term monitoring. The monitoring will include collection and evaluation of water levels on the inside and outside of the wall to watch for leakage through or under the wall. In addition, there will be ongoing groundwater sampling of monitoring wells in all directions down gradient from the barrier wall to provide evidence if there is a change in groundwater quality due to leakage.

### **3.6 INDICATOR CONTAMINANTS AND AREAS OF GROUNDWATER CONTAMINATION**

#### **3.6.1 Upper Aquifer**

Figure 10 provides a spatial summary of the highest detections of VOCs, SVOCs, and metals in upper aquifer monitoring wells during the four consecutive quarterly sampling events of the baseline monitoring. The frequency of detection of each compound in the four sampling events is also indicated on the figure. It is worth noting that the sensitivity

of the analytical instrumentation performing the VOC analyses has a "detection window" of approximately two orders of magnitude. Therefore, if there is a variability in the concentrations of different compounds that is greater than two orders of magnitude, the compound that is present at the lower concentration may not be detected. For example, if the toluene concentration in a certain sample is 1,000 ug/L, the analysis may not report a benzene concentration of 10 mg/L, because it falls outside the sensitivity of the instrumentation.

Time trend plots for benzene and chloroethane, the primary indicators of VOC contamination wells are included in Appendix C. Analytical results for samples from wells such as MW48, MW49, MW13 and MW6 that are near identified groundwater contaminant source areas show consistent, relatively high concentrations (greater than 100 ug/L) of benzene and chloroethane and lower concentrations of several other VOCs and/or SVOCs; the other VOCs and SVOCs were typically not detected consistently in all sampling events. Based on these results, benzene and chloroethane are indicators of groundwater impacts from the Site. These contaminants would also be good indicators of downgradient impacts because they are both relatively soluble and mobile in groundwater.

The distribution of benzene and/or chloroethane relative to identified Site source areas is consistent with the groundwater flow pattern in the upper aquifer. For example, based on the water table configurations shown on Figures 1 and 2, transport from a source or sources near MW6 would be expected to the south and southeast in the direction of wells such as MW19 and MW45; both benzene and chloroethane are present in groundwater at MW19 and MW45. Benzene at relatively low concentrations is also present at MW15 in this southern area.

Samples from several other monitoring wells located in the north and west part of the Site show detections of chloroethane and/or benzene. Groundwater flow in the north part of the Site appears to be to the northwest and west, controlled by regionally higher groundwater to the east and local discharge to the drainage ditch which enters the Site between wells MW13 and MW49. Recent changes in benzene concentrations at MW48 and MW49 between the June and September 1997 sampling events are probably attributable to changes in local groundwater flow patterns as a result of construction and operation of the PGCS. In other words, contaminants near the north part of the ACS facility are being "pulled" past these two wells and into the PGCS trench. Although high benzene concentrations are found at MW48, benzene is not detected at MW37, about 300 feet further to the west. This is strong evidence that the benzene impact ends in the vicinity of the drainage ditch. There is a strong gradient directly to the west from the ACS facility, where groundwater discharges to the PGCS. Samples from MW46, which is furthest to the west, have consistently contained benzene but only at low concentrations, indicating that the impacted area ends about 500 feet from the western ACS fence line.

To the east, only well MW12 has shown either of the indicator contaminants; one of the four samples from this well contained benzene at a low concentration. In this area, groundwater flow appears to be westerly toward the Site but the gradient is very low. Due

to the low gradient, it is possible that there have been temporary flow reversals in the past that resulted in the temporary transport of benzene to this location.

Analytical results for a number of wells that are either farther from the identified sources than those where indicator contaminants are present or are upgradient of the sources, show phenol and, in some cases, bis(2-ethylhexyl)phthalate and dimethylphthalate detections. These wells include MW18, MW37, MW38, MW40, MW41, MW42, MW43, MW44 and MW47. The phthalate detections at these locations appear to reflect field or laboratory artifacts rather than site impacts for the following reasons. (This concept is further supported by lower aquifer results in section 3.5.2.)

- Elevated levels of phthalate in groundwater may be a health concern under certain conditions as indicated by the remediation level of 5.8 ug/L listed in Appendix B of the Statement of Work.
- Phthalates are recognized common field and laboratory artifacts because they may be associated with plastics.
- Phthalates are relatively immobile in groundwater and are not likely to be the first compounds to arrive at a location downgradient from a source.
- Phthalates are only reported at a few wells (MW37, MW42, MW43 and MW44) and at all these locations they were not detected consistently in samples (i.e., only in one of the four sampling events).
- Phthalates are not reported consistently at the same locations as indicator contaminants, and hence Site impacts, are present. For example, bis(2-ethylhexyl)phthalate is reported at 8, and dimethylphthalate at 1, of the 11 locations where benzene and/or chloroethane were detected. At all these locations, the phthalate compound was detected in only one sampling event. This pattern also suggests that the phthalate detections at Site-impacted wells are field or laboratory artifacts.
- Since phthalates have been detected in samples from monitoring wells where no benzene or other VOC has been detected, it is apparent that VOCs such as benzene are not reliable indicators of phthalate occurrence. This would be true if phthalates are concluded to be a laboratory artifact.
- When bis(2-ethylhexyl)phthalate or dimethylphthalate were detected at wells with benzene and/or chloroethane, the concentrations were generally lower than those in the wells where indicator contaminants are absent. This concentration pattern is strong evidence that the phthalates are artifacts rather than a result of Site activities.

Phenol has been reported at all monitoring wells, but generally not for all sampling events. Most of these detections do not appear to be Site-related for the following reasons. The

distributions and concentrations of phenols are anomalous because they do not correlate with the distribution of known organic contaminants at the Sites, which have well defined plumes of contamination and which follow well document flow paths outward from defined source areas. Phthalates and phenols were detected in samples collected both upgradient and downgradient locations at the Sites. In addition, the highest detected phenols concentrations were found in samples collected from the deepest wells (as high as 340 ppb), while concentrations in shallow wells were much lower, and were not detected in field blanks.

It was noted that the approved sampling SOP required replacing the PVC tubing with a new length of tubing between each well. It was also noted that the water flows through the tubing at a rate of about ten feet per minute when pumped at the rates specified by the low flow sampling protocol. It was evident that water drawn from deeper wells has a longer contact time with the tubing than water drawn from shallow wells. Furthermore, it was noted that when collecting the field blank, the field technician used a very short piece of tubing, generally one to two feet in length. Therefore, a test was developed and conducted to evaluate whether the 0.5 ID., flexible, reinforced PVC, Grundfos tubing used for Low Flow Sampling could be introducing the phenols (and other compounds) into the sample volume. A proposed testing procedure was submitted to U.S. EPA and IDEM on March 13<sup>th</sup>, 1998 and the full details of the tests and results were provide to the Agencies in a letter report. *"Results of Analytical Testing of PVC Tubing,"* dated April 9, 1998.

In summary, the test demonstrated that phenols, phthalates, and some tentatively identified compounds (TICs) can be added to groundwater samples when using the Grundfos PVC tubing and following a low flow sampling protocol. Phenol was reported in the test sample at concentrations in the range of 400 ug/L in samples drawn through PVC tubing while replicating low flow sampling from a deep monitoring well. Furthermore, bis(2-ethylhexyl)phthalate was reported at concentrations in the range of 75 ug/L in the same sample. TICs found in the sample included (2-butoxyethoxy)-ethanol and dehydroacetic acid, with estimated concentrations of 200 and 56 µg/L, respectively.

The concentrations of phenol and bis(2-ethylhexyl)phthalate measured in the investigative and MS/MSD samples from PVC Grundfos tubing are higher than the levels of these compounds reported during routine sampling of groundwater at the ACS site. For example, during the September 1997 sampling event, phenol and bis(2-ethylhexyl)phthalate were measured at concentrations up to 340 and 76 µg/L, respectively. These concentration relationships indicate that leaching from PVC Grundfos tubing during routine sampling can account for the detections of phenol and bis(2-ethylhexyl)phthalate in monitoring well samples from the ACS Site. The typical pattern of higher concentrations of both of these compounds in the deep wells also suggests that PVC Grundfos tubing is the source. Again as an example, during the September 1997 sampling event, phenol was measured at concentrations up to 130 µg/L in shallow wells and 340 µg/L in deep wells; bis(2-ethylhexyl)phthalate was measured at concentrations up to 15 µg/L in shallow wells and 76 µg/L in deep wells. Higher concentrations in deeper wells are consistent with a source in



the tubing because longer sections of new PVC Grundfos tubing are used in these wells during routine sampling.

Assuming that detections of phenol (and possibly phthalates) are unrelated to Site contamination, three areas of groundwater contamination have been designated in the upper aquifer: south, north, and west. Each area includes wells where groundwater in the upper aquifer has been affected by site activities. The south area includes wells MW6, MW19 and MW45. Based on the pattern of groundwater flow in this area, well MW18 is upgradient with respect to the area of groundwater contamination, wells MW42 and MW43 are downgradient, and wells MW15, MW41, MW44 and MW47 are sidegradient. The low levels of benzene reported at MW15 suggest that this well is located at the boundary of the south area.

The north area includes wells MW48 and MW49. Based on the pattern of groundwater flow in the north part of the Site, MW40 is upgradient from the area of groundwater contamination, MW37 is downgradient and MW38 and MW39 are sidegradient. Well MW11 may also be sidegradient based on the one reported detection of tetrachloroethene.

The west area includes wells MW13 and MW14. Prior to the time when the PGCS began discharging to the wetlands, MW46 was downgradient from the source area at the ACS plant. However, the continuous PGCS discharge since June 1997 introduces a mound of clean groundwater between the site and MW46. Future sampling at MW46 will collect primarily the treated water that is discharged into the wetland and infiltrates into the ground.

### **3.6.2 Lower Aquifer**

Figure 11 provides a spatial summary of the highest detections of VOCs, SVOCs, metals in upper aquifer monitoring wells during the four consecutive quarterly sampling events of the baseline monitoring. The frequency of detection of each compound in the four sampling events is also indicated on the figure (See comment in Section 3.5.1 regarding potential to mask low level VOC detections if one or more compounds in a sample has a concentration two orders of magnitude higher than another compound).

Time trend plots for benzene and chloroethane in lower aquifer wells MW9 and MW10C are included in Appendix C. Benzene and/or chloroethane have been reported in the lower aquifer at only a few locations. Chloroethane was detected at MW9 (soon to be replaced by MW9R), MW10C and MW29, and benzene at MW9, MW29, MW33 and MW53. The presence of indicator contaminants at MW9 is attributable to downward leakage along the well casing from the upper to the lower aquifer. A tracer test conducted at this location, as discussed in Section 2, documented that leakage. MW29 is located adjacent to MW9, but it is screened 15 feet lower. The concentrations of benzene at MW29, MW33 and MW53 are much lower than at MW9. The detections at MW29 indicate that the benzene extends approximately 15 feet below MW9. The other detections at MW10C, MW33 and MW53 likely represent transport through the lower aquifer from MW9, which is directly upgradient.

Bis(2-ethylhexyl)phthalate was reported in samples from many lower aquifer wells; dimethylphthalate was detected at only one well. As in the upper aquifer, the occurrence of these compounds does not correlate with benzene and/or chloroethane, providing further evidence that the phthalate detections at the Site are due to field or laboratory artifacts. (See Section 3.6.1 on Pages 15 and 16 for further details.

Phenol was reported for most of the lower aquifer wells, including wells such as MW22 and MW50, that are upgradient from the Site. Moreover, the phenol levels at some of the lower aquifer wells, including upgradient wells, were higher than those measured in the shallow aquifer, even near identified source areas. These distribution and concentration patterns strongly support the earlier conclusion that phenols are present in groundwater throughout the area and are not derived from site activities.

Based on the baseline groundwater sampling results, only one area of groundwater contamination is present in the lower aquifer. This area includes MW9/MW29 and the downgradient wells MW10C, MW33 and MW53.

### 3.7 TENTATIVELY IDENTIFIED COMPOUNDS (TICS)

Tentatively Identified Compounds (TICs) were detected in several upper and lower aquifer monitoring wells. Four TICs were reported in two or more monitoring wells in the September 1997 sampling results. The following is a tabulation of tentatively identified compounds, number of detections, and highest detected concentrations.

<u>Tentatively Identified Compound</u>	<u>Number of Detections</u>	<u>Maximum Concentration</u>
Chlorodifluoro-methane	4	95 ug/L
Ether	7	12,000 ug/L
Tetrahydrofuran	5	170 ug/L
2-ethyl-1-hexanol	9	28 ug/L

Table 10 contains a more detailed listing of these TICs and monitoring well locations. The complete listing of TICs for individual monitoring wells is compiled in Appendix C and D.

## 4.0 GROUNDWATER MONITORING PLAN

### 4.1 SCOPE AND OBJECTIVES

The Statement of Work (SOW) included as Attachment 2 of the September 30, 1994 Administrative Order for the American Chemical Service Superfund Site states that the respondents shall implement:

"...a groundwater monitoring program designed to detect changes in water quality or concentrations of hazardous substances, contaminants, or pollutants in the groundwater at and beyond the point of compliance and shall include upgradient, downgradient and transgradient monitoring. The groundwater monitoring program shall provide for verification sampling and updating of the current local hydrogeological setting and associated conditions. The program shall consist of summarizing currently available information; installing additional monitoring wells, piezometers, and soil borings; and performing in field measurements or analysis of water levels, pH, temperature, specific conductance, hydraulic conductivity, and other measurements or analyses as approved by EPA, after reasonable opportunity for review and comment by the state. The results of this investigation shall be submitted in report form to EPA for review and approval and shall be incorporated into the work plans."

As discussed in Section 3.2, construction work conducted recently at the ACS Site has modified groundwater flow patterns locally. A barrier wall with internal extraction trenches (BWES) has been constructed around the areas of buried waste and a series of piezometers has been installed to allow documentation of the water levels inside and outside the barrier wall. A perimeter groundwater containment system (PGCS) that includes a 1,500 foot extraction trench has also been installed to prevent further off-site migration of contaminated groundwater to the north and west of the ACS facility. Piezometers have been installed along the trench to allow documentation of gradients induced by pumping. A water treatment plant has been constructed to treat the groundwater extracted from inside the barrier wall and from the PGCS. Influent and effluent samples will be collected to document the quality of the untreated and treated water, as part of the Site monitoring.

Remedial activities will be conducted at the Site for the next several years and so it is premature to develop the long term monitoring Plan at this time. On the basis of the results of the Baseline Groundwater Sampling, an interim groundwater monitoring plan has been developed. In general, groundwater sampling will be conducted semi-annually at the majority of the wells in the monitoring network. One annual sampling event will be conducted for full scan analyses of the samples and the other will be conducted for a reduced list of indicator parameters. The following site-specific objectives have been

developed for the Interim Monitoring Plan at the ACS NPL Site during remedial design and remedial action activities:

- Collect water level data to monitor groundwater flow in the upper and lower aquifers and calculate the hydraulic gradients between the aquifers
- Collect water level data to document the performance of the PGCS and BWES and to evaluate changes in the groundwater flow system resulting from the remedial actions (these activities are outlined in the Performance Standard Verification Plan, April 1997)
- Collect and analyze samples of the untreated groundwater to provide characterization of the water quality inside the barrier wall
- Collect and analyze samples of treated water to document compliance with the effluent standards
- Collect and analyze groundwater samples from upgradient monitoring wells in the upper and lower aquifer to document background groundwater quality
- Collect and analyze groundwater samples from the monitoring wells at the down-gradient boundaries of the site to closely monitor the status of the boundaries of groundwater impacts
- Collect and analyze groundwater samples from the interior of the areas of contaminated groundwater to document how concentrations change with time and in response to the remedial actions
- Assess progress toward attaining cleanup objectives in contaminated areas.

The proposed monitoring plan has been developed to meet these objectives, in the context of the groundwater flow system and the nature and extent of the contaminated groundwater.

As additional information becomes available, it will be analyzed with respect to the above objectives. If the new information indicates that changes to the monitoring program (either additions or deletions) are needed to meet the objectives, these changes will be proposed to U.S. EPA for approval. Similarly, U.S. EPA may seek additional groundwater monitoring wells or laboratory analyses based on the need to meet the monitoring objectives.

## **4.2 WATER LEVEL MEASUREMENTS**

Water level measurements will be made quarterly at upper and lower aquifer monitoring wells and piezometers. Field time to collect water level data at all points on Table 11 will be scheduled to be completed in no more than two days, in order to minimize the effects of changes in water levels with time. The water levels will be tabulated and used to calculate

groundwater elevations, gradients and develop contour plots of the water table and lower aquifer potentiometric surface. The proposed water level measurement program includes the upper and lower aquifer wells and the staff gauge listed in Table 11 (this table is designed to serve as a field work sheet). The proposed networks of upper and lower aquifer gauging points are described below.

#### **4.2.1 Upper Aquifer Gauging Points**

Proposed upper aquifer gauging points include:

- Those wells that are to be sampled as part of the upper aquifer sampling program (See Section 4.3)
- Those wells and piezometers that are already included as part of the PGCS and BWES gauging activities
- Wells or piezometers that fill remaining gaps in the gauging network
- A staff gauge in the pond to the southeast of the Site

The proposed upper aquifer wells and staff gauge in the water level measurement program are shown on Figure 12. This figure shows that the distribution of gauging locations is adequate to prepare a representative water table map. Water levels will be measured at these wells, piezometers and staff gauge during each sampling event, and a water table map will be developed using the data collected.

#### **4.2.2 Remediation Component Gauging Points**

Piezometers have been installed to provide water level information in the vicinity of the Perimeter Groundwater Containment System (PGCS) and the Barrier Wall and Extraction System (BWES).

The PGCS consists of a 1,500 foot long groundwater extraction trench located north and west of the ACS facility (Figure 12). Five arrays of three piezometers each have been constructed across the extraction system. At each location, one piezometer is located in the center of the extraction trench, one piezometer is located on the inside (south or east) of the trench and one piezometer is located outside (north or west) of the trench. The piezometer groups are shown on Table 11, numbers P81 through P92.

The Barrier Wall is a 4,500 foot vertical containment wall constructed from combined 60 mil high density polyethylene (HDPE) and 16 inch bentonite slurry mixture. The wall is keyed two feet into the confining clay layer, located at an approximate elevation of 620 feet above mean sea level, which is between 20 and 35 feet below ground surface. The wall was constructed to completely surround the active ACS Facility, the Off-Site Containment Area, and the Kapica-Pazmey Area. Eight 100 foot long extraction trenches were constructed inside the wall to extract groundwater and pipe it to the PGCS plant for treatment and release. Eight pairs of piezometers, numbered P93 through P108 were installed around the circumference of the barrier wall (Figure 12). In each pair, one

piezometer is screened just outside the barrier wall and the other is just inside the barrier wall.

Water levels will be measured at each of these piezometers each quarter and compiled and evaluated with the overall Site Monitoring Reports.

#### **4.2.3 Lower Aquifer Gauging Points**

Because groundwater flow in the lower aquifer is simpler (north with a small northwest flow component), fewer gauging points are necessary to depict the potentiometric surface. Therefore, the wells listed in Table 11 are proposed to be gauged during each sampling event. At clustered locations along the northern boundary of the Site (Figure 13) only the upper most lower aquifer wells are proposed for gauging, because water levels from the middle or lower, lower aquifer wells does not yield additional useful information. These wells will provide adequate data to prepare a potentiometric surface map for the lower aquifer.

### **4.3 MONITORING WELL SAMPLING**

#### **4.3.1 Semi-Annual Sampling**

The sampling schedule for the interim groundwater monitoring plan is summarized in Table 12 for the upper aquifer wells and Table 13 for the lower aquifer wells. In general, there will be two major sampling events each year and two minor sampling events. The major sampling events will be conducted in the spring and fall. Each spring all the up gradient and down gradient wells in both aquifers will be sampled for full scan TCL/TAL parameters. An indicator event will be conducted each fall. In this event, all wells in the monitoring network, including upgradient, downgradient and side gradient wells will be sampled and analyzed for indicator parameters. The indicator parameters will be:

**VOCs:** PCE, TCE, TCA, DCE, 1,2-DCA, VC, Chloroethane, and Benzene

**SVOCs:** Phenol, Phthalates

**Metals:** Arsenic and Lead

#### **4.3.2 Quarterly Sampling**

Three monitoring wells will also be sampled during the other quarters, summer and winter. These include upper aquifer monitoring wells MW48 and MW49 and lower aquifer monitoring well MW9R. As shown in Tables 12 and 13, these three wells will be sampled once each year for the full TCL/TAL parameter list (along with all the other wells) and for indicator parameters in the other three quarters of the year.

#### **4.3.3 Sampling Protocols**

All monitoring wells will be purged and sampled using low-flow methods in accordance with the approved Monitoring Well Sampling Proposal and Protocol SOP for the Upper Aquifer Investigation (revision: July 25, 1996) and other Agency-approved SOPs. Field parameters, pH, specific conductance, temperature, and turbidity, will be measured and

recorded during well purging. Sampling activities are expected to be conducted over a two week period. Standard SW-846 methods will be used for laboratory analyses. Data validation will be conducted on all samples collected.

As indicated in Section 4.1, water levels will be measured at the upper and lower aquifer monitoring wells, piezometers, and staff gauges listed in Table 11 once each quarter, coinciding with the sampling that is conducted. A sufficient number of field technicians will be used so that all the water level locations can be covered in one working day, to minimize potential water level variability with time.

#### **4.4 PRIVATE WELL SAMPLING**

The ACS Group will give U.S. EPA four weeks notice of the planned annual collection of samples from five residential wells in the ACS vicinity. If U.S. EPA requests a change in the sampling within two weeks of the event, the ACS group will consider the technical basis provided by the U.S. EPA and schedule the necessary sampling to coincide with one of the groundwater monitoring events. As in the past, the ACS group is committed to collect whatever data is technically justified to meet its obligations to the U.S. EPA.

The following private wells are proposed for sampling (assuming owners will provide access):

<u>Well Identifier</u>	<u>Street Address</u>
PW-Y	1000 Reder Road
PW-A	1007 Reder Road
PW-B	1009 Reder Road
PW-C	1029 Reder Road
PW-I	739 S. Arbogast

The well locations are shown on Figure 6. If the U.S. EPA notifies the ACS group prior to the sampling date, one or more of those five samples can be assigned to alternate locations selected by U.S. EPA. Each well will be sampled following the approved private well sampling protocol, and the samples will be analyzed for full scan TCL/TAL parameters. To eliminate delays in reporting, the analytical laboratory will be asked to provide the analytical results as soon as they are available, rather than waiting and providing the results to the ACS Group along with the results of all other sampling.

#### **4.5 OTHER MONITORING**

In accordance with the Performance Standard Verification Plan (PSVP) for the PGCS, the effluent of the groundwater treatment system will be sampled during each of the periodic sampling events. Results for these samples will provide information to document the performance of the PGCS.

## **4.6 REPORTING**

A report will be produced each quarter to provide the collected data and analysis to the Agencies. The reports will be submitted to the Agencies, not more than ten weeks after the completion of the sampling event. Each report will include tabulations of data, evaluation of any changes in groundwater flow and analytical data, and recommendations for actions, if necessary, for the next sampling event.

### **4.6.1 Tabulation of Data**

Water level data, field observations, and analytical results will be tabulated each quarter for each well sampled.

### **4.6.2 Evaluation of Changes**

The calculated groundwater elevations will be used to develop contour plots of the upper aquifer and lower aquifer, as well as to calculate vertical gradients between the upper and lower aquifer. These will be compared to the previous maps and gradients.

Appendix C has been included in the report, and it lists the maximum concentration of each contaminant detected in each monitoring well during the groundwater sampling at the Site. The results from future sampling rounds will be compared to this list, and any detections that exceed the concentrations listed in the table will be highlighted. Each highlighted value will be evaluated for significance, in the analysis section of the corresponding groundwater monitoring report.

The evaluation will take a number of factors into account to determine significance. Factors will include: groundwater flow direction, concentration of the same compound in the well during previous sampling events, concentrations of the same compound at other nearby wells, and magnitude of the exceedance of the trigger. The exceedance will be considered significant if it shows that the area of groundwater contamination is increasing in area or increasing in concentration. Trigger events will be reported within 90 days of completion of the sample collection, and the report will include a recommendation to the Agencies for action.

### **4.6.3 Recommendations for Action**

Actions may range from a limited action such as waiting until the next sampling event for another evaluation, to actions such as additional sampling, modification of the interim monitoring program, or implementation of additional remedial or corrective actions.

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**Table 1**  
**Groundwater Elevations - September 22, 1997**  
**American Chemical Service, Inc. NPL Site**

**Lower Aquifer Wells**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOIC	Depth	Elevation	
MW-7	6113	6732	641.46	19.92	621.54	
MW36	6164	6768	637.85	16.32	621.53	
MW-8	5934	7506	640.43	18.23	622.20	Apparent Measurement Error: Depth should be 19.23
MW31	5907	7505	641.64	20.45	621.19	
MW32	5902	7507	641.84	20.64	621.20	
MW-9	4893	6990	639.05	17.45	621.60	
MW29	4886	7012	638.06	16.48	621.58	
MW34	4880	7002	638.14	16.53	621.61	
MW-10	5200	7784	635.49	14.27	621.22	
MW30	5194	7774	634.25	13.19	621.06	
MW33	5189	7774	634.13	13.07	621.06	
MW51	5198	7767	634.16	13.09	621.07	
MW-10C	5229	7554	637.45	16.10	621.35	In Sand Seam in Confining Layer
MW-21	4546	7067	633.76	12.24	621.52	
MW-22	5208	4898	636.48	14.26	622.22	
MW-23	4717	7404	633.31		633.31	
MW-24	4596	8033	635.22	14.06	621.16	
MW28	5657	5696	648.77	26.72	622.05	
MW50	5269	5383	649.43	27.42	622.01	
ATMW-4D	5297	7311	637.99	NM	NM	ACS facility Well - Hornet's Nest
W-2	5292	7307	638.46	9.35	629.11	Lower Aquifer Well
M-1D	4359	5747	638.32	16.36	621.96	Griffith Landfill Well
M-2D	3997	6495	637.11	15.31	621.80	Griffith Landfill Well
M-3D	4144	6821	632.19	10.46	621.73	Griffith Landfill Well
M-4D	4949	6538	633.32	11.71	621.61	Griffith Landfill Well
MW35	4934	6542	634.50		NM	Discovered Damaged 3/97
M-5D	4171	7094	634.18	12.64	621.54	Griffith Landfill Well
MW52	4996	7814	632.74	11.56	621.18	
MW53	4977	7833	632.87	11.71	621.16	
MW54	5590	7592	636.05	15.06	620.99	
MW55	5595	7604	636.63	15.63	621.00	

**Lower Aquifer Piezometers**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOIC	Depth	Elevation	
PZ44	6170	6766	638.47	16.96	621.51	
PZ42	5662	5696	648.44	26.39	622.05	
PZ43	5662	5702	648.69	26.64	622.05	

**Table 1**  
**Groundwater Elevations - September 22, 1997**  
**American Chemical Service, Inc. NPL Site**

**Upper Aquifer Wells**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOIC	Depth	Elevation	
MW-2	5033	6839	638.05	9.26	628.79	Functional for water levels only
MW-3	5299	7314	636.62	8.56	628.06	
MW-4	6112	7126	641.05	8.28	632.77	
MW-5	5788	6482	642.13	9.01	633.12	
MW-6	5298	5520	655.28		655.28	
MW-11	6377	7329	640.47	7.69	632.78	
MW-12	6019	6352	642.74	9.54	633.20	
MW-13	5050	7814	634.08	3.96	630.12	
MW-14	4882	6995	638.56	9.39	629.17	
MW-15	4721	5003	637.89	6.47	631.42	
MW-16	5065	6596	638.52		NM	Not found - lost due to barrier well construction
MW-17	5656	5677	647.14	14.62	632.52	
MW-18	5836	5746	644.89	10.39	634.50	
MW-19	5231	4943	635.78	4.41	631.37	
MW-20	5095	5028	642.98	11.52	631.46	
AM-05	5224	6360	637.28	1.30	635.98	Labeled "Test Well"; Not shown on potentiometric map
Red Well	5204	6466	639.01	3.39	635.62	Not shown on potentiometric map
W-1	5305	7323	637.33	15.93	621.40	Not shown on potentiometric map
MW37	5395	7976	636.78	6.37	630.41	
MW38	5903	8216	636.51	6.72	629.79	
MW39	6253	7947	637.77	6.69	631.08	
MW40	6379	6831	639.46	6.73	632.73	
MW41	6242	4517	632.74	8.03	624.71	
MW42	6264	3808	632.32	7.29	625.03	
MW43	5880	3719	633.56	7.63	625.93	
MW44	5390	4303	633.04	4.60	628.44	
MW45	5830	4388	635.35	6.98	628.37	
MW46	4526	7424	633.32	3.07	630.25	
MW47	5958	5084	640.54	7.63	632.91	
MW48	5669	7814	636.36	6.30	630.06	
MW49	5551	7650	637.00	7.15	629.85	

**Upper Aquifer Landfill Wells**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOIC	Depth	Elevation	
M-1S	4362	5743	639.09	8.21	630.88	
M-2S	3999	6491	637.12	7.89	629.23	
M-3S	4142	6819	631.88	4.71	627.17	
M-4S	4953	6537	633.42	6.31	627.11	
M-5S	4170	7089	634.17		634.17	

**Table 1**  
**Groundwater Elevations - September 22, 1997**  
**American Chemical Service, Inc. NPL Site**

**Staff Gauges**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOSG	Depth	Elevation	
SG-1	5023	6196	633.50	NM	633.50	Dry
SG-2	4423	6864	622.84	2.74	620.10	
SG-3	4180	7123	631.17	1.97	629.20	
SG-4	5228	6611	635.73	0.20	635.53	
SG-5	5464	7713	633.36	NM	633.36	Dry
SG-6	4495	8075	632.97	2.68	630.29	
SG-7	5403	6889	637.01	1.33	635.68	
SG-9	3846	6336	632.42	NM		Not Found
SG-10	6748	7238	637.29	3.05	634.24	
SG-8R	5409	5252	634.70	2.75	631.95	
SG-11	5859	8245	634.62	NM	634.62	Dry
SG-12	5596	7867	634.12	NM	634.12	Dry

**Table 1**  
**Groundwater Elevations - September 22, 1997**  
**American Chemical Service, Inc. NPL Site**

**Piezometers**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOC	Depth	Elevation	
LW-1	4807	5070	644.57		644.57	
LW-2	4662	5465	649.70	17.88	631.82	
P-1	5696	6388	643.49			New 9/97 - Installed after water level monitoring
P-2	5577	6165	645.57	NM	NM	Destroyed 6/97
P-3	5453	6470	639.87	4.13	635.74	
P-4	5432	6228	639.25	NM	NM	Not Found
P-5	5285	6510	636.70	1.33	635.37	Buried in Brush
P-6	5150	6551	638.75	NM	NM	Not Found 6/97
P-7	5950	6630	643.63	10.43	633.20	
P-8	6156	6734	639.27	6.20	633.07	
P-9	6134	6994	638.88	5.91	632.97	
P-10	5413	5852	649.32	13.25	636.07	Top of inner casing cracked 3/97 & 6/97
P-11	5199	5900	649.14	12.72	636.42	Bent, free product present 3/97 & 6/97
P-12	5076	5723	650.08	13.63	636.45	Free Product in Piezometer 3/97 & 6/97
P-13	4878	5735	651.20	18.80	632.40	
P-14	5014	5914	645.33	13.34	631.99	
P-15	5003	6187	639.93	9.90	630.03	
P-16	4673	5749	648.80	16.08	632.72	
P-17	4584	6006	654.64	22.65	631.99	Inside Griffith Landfill
P-18	4623	6224	649.84	5.18	644.66	Inside Griffith Landfill
P-19	4977	5043	639.71	NM	NM	Not Found
P-20	5087	6212	641.13			New 9/97 - Installed after water level monitoring
P-21	4569	6537	632.82	NM	NM	Not Found
P-22	4636	6732	634.30	8.53	625.77	
P-23	4689	7018	636.18	7.74	628.44	
P-24	5002	7178	636.06	7.22	628.84	
P-25	5131	7510	635.01	6.62	628.39	
P-26	4764	7309	634.23	4.73	629.50	
P-27	4904	7020	639.70	11.04	628.66	
P-28	5111	7486	644.53	13.99	630.54	
P-29	5738	6619	642.37	6.63	635.74	Free Product in piezometer 9/97
P-30	5626	6793	642.42	NM	NM	Not Found
P-31	5480	7159	641.03	5.25	635.78	
P-32	5746	7026	642.32	6.63	635.69	
P-33	5226	7129	640.20	5.30	634.90	
P-34	5279	6692	639.46	4.13	635.33	

**Table 1**  
**Groundwater Elevations - September 22, 1997**  
**American Chemical Service, Inc. NPL Site**

**Piezometers Cont.**

P-35	5515	6572	641.44	5.66	635.78	Free Product in piezometer 9/97
P-36	5410	6851	645.89	10.19	635.70	
P-37	5330	6949	641.37	NM	NM	Destroyed 3/97
P-38	5149	6992	639.87	NM	NM	Destroyed 3/97
P-39	5940	6902	642.00	6.32	635.68	
P-40	5931	7241	638.77			New 9/97 - Installed after water level monitoring
P-41	5663	7377	637.23			New 9/97 - Installed after water level monitoring
P-49	5145	6949	638.98			New 9/97 - Installed after water level monitoring
P-50	5129	6964	639.59		NM	Not Found
P-51	3876	6859	635.07		NM	Not Found
P-52	4100	7845	636.66	7.32	629.34	
P-53	4597	8015	636.18	5.92	630.26	
P-54	4936	8081	638.28	7.89	630.39	
P-55	5628	7979	636.08	6.38	629.70	
P-56	6405	7665	639.46	7.20	632.26	
P-57	6783	7573	638.05	5.12	632.93	
P-58	6454	6932	638.30	5.73	632.57	
P-59	6389	6590	639.22	6.13	633.09	
P-60	6111	6051	640.23	6.88	633.35	
P-61	5533	5284	638.58	6.97	631.61	
P-62	5665	4945	637.06	6.26	630.80	
P-63	5483	7689	637.70	8.08	629.62	
EW-1	5113	6942	639.50		NM	Not Found
P-64	4617	7065	634.87	6.14	628.73	
P-65	4615	7063	634.77	5.93	628.84	
P-66	4729	7034	636.02	7.56	628.46	
P-67	4732	7034	636.06	7.54	628.52	
P-68	4743	7752	634.48	3.81	630.67	
P-69	4741	7751	634.66	3.97	630.69	
P-70	4880	7680	635.38	5.11	630.27	
P-71	4876	7682	635.32	4.84	630.48	

**Table 1**  
**Groundwater Elevations - September 22, 1997**  
**American Chemical Service, Inc. NPL Site**

**New Piezometers - Upper Aquifer**

Well Designation	Reference Points			9/22/97		Notes
	East	North	TOC	Depth	Elevation	
P-81	5577	7581	636.19	7.05	629.14	New 6/97
P-82	5577	7572	635.77	6.78	628.99	New 6/97
P-83	5577	7562	635.95	6.84	629.11	New 6/97
P-84	5322	7603	634.35	5.35	629.00	New 6/97
P-85	5326	7594	634.08	5.14	628.94	New 6/97
P-86	5329	7585	634.41	5.57	628.84	New 6/97
P-87	5121	7466	633.88	5.63	628.25	New 6/97
P-88	5130	7460	633.90	5.96	627.94	New 6/97
P-89	5137	7454	634.02	6.09	627.93	New 6/97
P-90	4881	7152	632.59	4.84	627.75	New 6/97
P-91	4889	7145	632.97	5.58	627.39	New 6/97
P-92	4896	7138	633.63	6.05	627.58	New 6/97
P-93	5136	7067	638.79	NM	NM	Not Found 9/97
P-94	5146	7061	638.98	NM	NM	Not Found 9/97
P-95	5146	6532	638.58	10.29	628.29	New 6/97
P-96	5156	6537	638.39	2.96	635.43	New 6/97
P-97	5098	6283	638.39	9.05	629.34	New 6/97
P-98	5130	6279	639.35	2.79	636.56	New 6/97
P-99	5020	5945	644.35	12.37	631.98	New 6/97
P-100	5031	5948	643.93	7.04	636.89	New 6/97
P-101	5550	5979	650.08			New 9/97 - Installed after water level monitoring
P-102	5517	5996	647.18			New 9/97 - Installed after water level monitoring
P-103	5672	6248	644.97			New 9/97 - Installed after water level monitoring
P-104	6267	5639	646.68			New 9/97 - Installed after water level monitoring
P-105	6678	5885	638.86			New 9/97 - Installed after water level monitoring
P-106	6685	5871	638.10			New 9/97 - Installed after water level monitoring
P-107	5766	7339	637.42	5.80	631.62	New 6/97
P-108	5757	7324	638.13	2.75	635.38	New 6/97

Note

All depth measurements and elevations are in units of feet.

**Table 2**  
**Vertical Gradients in Wetlands - September 1997**  
**American Chemical Service, Inc. NPL Site**  
**Griffith, Indiana**

Piezometer Nest	Screen Interval		Screen Midpoint	Separation (feet)	Groundwater Elevation			Hydraulic Gradient
	Top	Bottom			Upper	Lower	delta	
P64	629.05	624.10	626.58	5	628.73			
P65	622.20	620.20	621.20			628.84	0.11	0.022
P66	629.45	625.10	627.28	8	628.46			
P67	620.50	618.50	619.50			628.52	0.06	0.007
P68	628.15	623.80	625.98	6	630.67			
P69	621.10	618.60	619.85			630.69	0.02	0.003
P70	628.55	624.20	626.38	6	630.27			
P71	621.00	619.00	620.00			630.48	0.21	0.035

**Notes:**

(-) = Downward Gradient

(+) = Upward Gradient

Water Levels Collected by Montgomery Watson on September 22, 1997.



**Table 3**  
**Vertical Gradients in Lower Aquifer - September 1997**  
**American Chemical Service, Inc. NPL Site**  
**Griffith, Indiana**

Well Nest	Screen Interval		Separation (feet)	Lowest Measurable Gradient	Groundwater Elevation					Vertical Gradients			
	Top	Bottom			Upper	Upper	Middle	Lower	delta	Upper/ Upper	Upper/ Middle	Middle/ Lower	Upper/ Lower
MW7	595.9	590.9			NA	621.54				NA			
PZ44	578.4	573.4	13	0.0008			621.51		-0.03		-0.002		
MW36	552.7	542.7	21	0.0005				621.53	0.02			0.001	WU
MW8	598.2	593.2			NA	error				NA			
MW31	574.6	564.6	19	0.0005			621.19		NA		NA		
MW32	547.3	537.3	17	0.0006				621.20	0.01			WU	WU
MW9	605.9	600.9			NA	621.60				NA			
MW29	585.9	575.9	15	0.0007			621.58		-0.02		-0.001		
MW34	552.8	542.8	23	0.0004				621.61	0.03			0.0013	WU
MW51	611.9	601.9			621.07								
MW10	603.0	598.0	-1	-0.0091		621.22			0.15	-0.136			
MW30	585.0	575.0	13	0.0008			621.06		-0.16		-0.012		
MW33	556.0	546.0	19	0.0005				621.06	0			WU	WU
MW28	588.7	578.7			NA	622.05				NA			
PZ42	568.5	563.5	10	0.0010			622.05		0		WU		
PZ43	554.5	549.5	9	0.0011				622.05	0			WU	WU
MW52	615.6	605.6			NA	621.18				NA			
MW53	555.7	545.7	50	0.0002			NA	621.16	-0.02		NA	NA	-0.0004
MW54	608.1	598.1			NA	620.99				NA			
MW55	547.6	537.6	51	0.0002			NA	621.00	0.01		NA	NA	WU

**Notes:**

Water levels collected by Montgomery Watson on September 22, 1997.

Positive values indicate upward gradient. Negative values indicate downward gradient

NA = Not Applicable. Calculating vertical gradient only for upper/lower interval at this location.

WU = Within Uncertainty of measurement error.

error = Apparent water level measurement error based on historical data

**Table 4**  
**Vertical Gradients Between Upper and Lower Aquifers - September 1997**  
**American Chemical Service, Inc. NPL Site**  
**Griffith, Indiana**

Well Designation	Screen Interval		Screen Midpoint	Separation (feet)	Groundwater Elevation			Hydraulic Gradient
	Top	Bottom			Upper	Lower	delta	
P28	634.30	629.30	631.80	11	630.54			
MW8	598.20	593.20	595.70			622.20	-8.34	-0.76
P27	631.02	626.02	628.52	8.5	628.66			
MW9	605.90	600.90	603.40			621.60	-7.06	-0.83
P8	635.36	630.36	632.86	18	633.07			
MW7	595.90	590.90	593.40			621.54	-11.53	-0.64
MW17	632.94	622.94	627.94	28	632.52			
MW28	588.70	578.70	583.70			622.05	-10.47	-0.37

**Notes:**

(-) = Downward Gradient

(+) = Upward Gradient

Water levels collected by Montgomery Watson on September 22, 1997.

**Table 5**  
**Summary of Field Parameter Measurements**  
**American Chemical Service, Inc. NPL Site**  
**Griffith, Indiana**

Well ID	Field Parameters				
	pH (std. units)	Conductivity (umhos/cm)	Conductivity (adjusted to 25°C)	Temperature (°C)	Turbidity (NTU)
M1S	6.56	2730	3500	14.0	52
M3S	6.78	1154	1354	17.6	13
M4S	6.26	2150	2432	19.2	99
MW4D	7.26	847	1083	14.1	133
MW6	6.43	1690	2092	15.4	28
MW7	8.28	677	888	13.1	98
MW8	7.80	460	594	13.7	45
MW09	6.60	1265	1574	15.2	91
MW10C	7.14	1620	2093	13.7	251
MW11	6.25	305	385	14.6	315
MW12	6.91	410	534	13.4	155
MW13	7.07	928	1215	13.2	24
MW14	6.48	611	691	19.2	407
MW15	7.01	4350	5397	15.3	15
MW18	6.89	746	930	15.1	5
MW19	7.45	5220	6141	17.5	34
MW21	11.34	646	835	13.7	45
MW22	9.11	3350	4491	12.3	86
MW23	7.04	829	1082	13.3	150
MW24	6.98	1034	1353	13.2	370
MW28	7.34	669	876	13.2	323
MW29	7.13	1060	1410	12.6	19
MW30	7.49	850	1139	12.3	168
MW31	7.46	674	913	11.9	175
MW32	7.44	759	1043	11.4	201
MW33	6.64	2990	3955	12.8	26
MW34	7.36	890	1190	12.4	17
MW36	7.36	827	1106	12.4	97
MW37	7.04	662	825	15.1	86
MW38	6.93	568	719	14.5	143
MW39	6.77	1354	1680	15.3	229
MW40	6.56	285	349	15.8	24
MW41	6.75	386	445	18.4	12
MW42	6.85	955	1134	17.1	335
MW43	6.78	900	1074	16.9	344
MW44	7.54	747	985	12.9	72
MW45	6.81	1280	1465	18.7	10
MW46	6.58	1078	1372	14.3	20
MW47	5.44	146	163	19.7	32
MW48	6.74	931	1138	15.9	57
MW49	6.76	782	929	17.1	27
MW50	7.18	3770	4883	13.6	444
MW51	7.01	1500	1963	13.2	168
MW52	7.01	1500	1974	13.0	92
MW53	6.56	3500	4768	11.7	257
MW54	7.46	1209	1616	12.4	100
MW55	7.21	851	1169	11.4	189

Notes:

NTU = nephelometric turbidity units

**Table 6**  
**Upper Aquifer Detections - September 1997**  
 American Chemical Services  
 Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
<b>Inorganics</b>						
MW06	Aluminum	9/23/97	180	J	BN	ug/L
MW06	Arsenic	9/23/97	42			ug/L
MW06	Barium	9/23/97	369			ug/L
MW06	Calcium	9/23/97	174000	J		ug/L
MW06	Chromium	9/23/97	33			ug/L
MW06	Cobalt	9/23/97	2		B	ug/L
MW06	Iron	9/23/97	14300			ug/L
MW06	Lead	9/23/97	9			ug/L
MW06	Magnesium	9/23/97	34200	J		ug/L
MW06	Manganese	9/23/97	2170			ug/L
MW06	Nickel	9/23/97	25		B	ug/L
MW06	Potassium	9/23/97	16900	J	E	ug/L
MW06	Sodium	9/23/97	79300	J	E	ug/L
MW11	Aluminum	9/29/97	421			ug/L
MW11	Barium	9/29/97	27		B	ug/L
MW11	Calcium	9/29/97	35700			ug/L
MW11	Chromium	9/29/97	3		B	ug/L
MW11	Cobalt	9/29/97	1		B	ug/L
MW11	Iron	9/29/97	1600			ug/L
MW11	Magnesium	9/29/97	11400			ug/L
MW11	Manganese	9/29/97	525			ug/L
MW11	Nickel	9/29/97	4		B	ug/L
MW11	Potassium	9/29/97	1150	J	BE	ug/L
MW11	Vanadium	9/29/97	1		B	ug/L
MW12	Aluminum	10/1/97	1690			ug/L
MW12	Arsenic	10/1/97	8	J	B	ug/L
MW12	Barium	10/1/97	72		B	ug/L
MW12	Calcium	10/1/97	47400			ug/L
MW12	Chromium	10/1/97	9	J	B	ug/L
MW12	Cobalt	10/1/97	2	J	B	ug/L
MW12	Copper	10/1/97	15	J	B	ug/L
MW12	Iron	10/1/97	24400			ug/L
MW12	Lead	10/1/97	12			ug/L
MW12	Magnesium	10/1/97	17300			ug/L
MW12	Manganese	10/1/97	1210			ug/L
MW12	Nickel	10/1/97	7		B	ug/L
MW12	Potassium	10/1/97	2930	J	BE	ug/L
MW12	Vanadium	10/1/97	20		B	ug/L
MW13	Barium	10/1/97	68		B	ug/L
MW13	Calcium	10/1/97	130000			ug/L
MW13	Iron	10/1/97	4420			ug/L
MW13	Magnesium	10/1/97	37000			ug/L
MW13	Manganese	10/1/97	604			ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
 American Chemical Services  
 Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW13	Potassium	10/1/97	2020	J	BE	ug/L
MW13	Sodium	10/1/97	24600	J	E	ug/L
MW14	Aluminum	9/29/97	7180			ug/L
MW14	Arsenic	9/29/97	9		B	ug/L
MW14	Barium	9/29/97	88		B	ug/L
MW14	Calcium	9/29/97	96400			ug/L
MW14	Chromium	9/29/97	26			ug/L
MW14	Cobalt	9/29/97	8		B	ug/L
MW14	Copper	9/29/97	32			ug/L
MW14	Iron	9/29/97	25900			ug/L
MW14	Lead	9/29/97	20			ug/L
MW14	Magnesium	9/29/97	22000			ug/L
MW14	Manganese	9/29/97	290			ug/L
MW14	Nickel	9/29/97	22		B	ug/L
MW14	Potassium	9/29/97	6440	J	E	ug/L
MW14	Vanadium	9/29/97	21		B	ug/L
MW14	Zinc	9/29/97	59			ug/L
MW15	Aluminum	9/23/97	487	J	N	ug/L
MW15	Arsenic	9/23/97	58			ug/L
MW15	Barium	9/23/97	1360			ug/L
MW15	Calcium	9/23/97	73000	J		ug/L
MW15	Chromium	9/23/97	13			ug/L
MW15	Cobalt	9/23/97	5		B	ug/L
MW15	Copper	9/23/97	13	J	B	ug/L
MW15	Iron	9/23/97	7010			ug/L
MW15	Lead	9/23/97	1		B	ug/L
MW15	Magnesium	9/23/97	74300	J		ug/L
MW15	Manganese	9/23/97	141			ug/L
MW15	Nickel	9/23/97	24		B	ug/L
MW15	Potassium	9/23/97	118000	J	E	ug/L
MW15	Sodium	9/23/97	415000	J	E	ug/L
MW15	Vanadium	9/23/97	1		B	ug/L
MW18	Barium	9/29/97	32		B	ug/L
MW18	Calcium	9/29/97	64200			ug/L
MW18	Chromium	9/29/97	71			ug/L
MW18	Copper	9/29/97	13		B	ug/L
MW18	Lead	9/29/97	14			ug/L
MW18	Magnesium	9/29/97	18900			ug/L
MW18	Manganese	9/29/97	85			ug/L
MW18	Nickel	9/29/97	6		B	ug/L
MW18	Potassium	9/29/97	3220	J	BE	ug/L
MW18	Selenium	9/29/97	4		B	ug/L
MW18	Sodium	9/29/97	67500	J	E	ug/L
MW18	Vanadium	9/29/97	2		B	ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
**American Chemical Services**  
**Griffith, Indiana**

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW19	Aluminum	9/29/97	402			ug/L
MW19	Arsenic	9/29/97	27			ug/L
MW19	Barium	9/29/97	648			ug/L
MW19	Calcium	9/29/97	85300			ug/L
MW19	Chromium	9/29/97	8		B	ug/L
MW19	Cobalt	9/29/97	2		B	ug/L
MW19	Copper	9/29/97	184			ug/L
MW19	Iron	9/29/97	4660			ug/L
MW19	Lead	9/29/97	2		B	ug/L
MW19	Magnesium	9/29/97	63900			ug/L
MW19	Manganese	9/29/97	243			ug/L
MW19	Nickel	9/29/97	17		B	ug/L
MW19	Potassium	9/29/97	98000	J	E	ug/L
MW19	Sodium	9/29/97	719000	J	E	ug/L
MW37	Aluminum	9/26/97	1310			ug/L
MW37	Arsenic	9/26/97	2		B	ug/L
MW37	Barium	9/26/97	34		B	ug/L
MW37	Beryllium	9/26/97	1		B	ug/L
MW37	Calcium	9/26/97	84200			ug/L
MW37	Chromium	9/26/97	7		B	ug/L
MW37	Cobalt	9/26/97	6		B	ug/L
MW37	Copper	9/26/97	12		B	ug/L
MW37	Iron	9/26/97	9440			ug/L
MW37	Magnesium	9/26/97	26600			ug/L
MW37	Manganese	9/26/97	682			ug/L
MW37	Nickel	9/26/97	14		B	ug/L
MW37	Potassium	9/26/97	2060	J	BE	ug/L
MW37	Sodium	9/26/97	17300			ug/L
MW37	Vanadium	9/26/97	3		B	ug/L
MW38	Aluminum	9/25/97	1280			ug/L
MW38	Arsenic	9/25/97	5		B	ug/L
MW38	Barium	9/25/97	54		B	ug/L
MW38	Calcium	9/25/97	57800			ug/L
MW38	Chromium	9/25/97	9		B	ug/L
MW38	Cobalt	9/25/97	2		B	ug/L
MW38	Copper	9/25/97	14		B	ug/L
MW38	Iron	9/25/97	16200			ug/L
MW38	Magnesium	9/25/97	20500			ug/L
MW38	Manganese	9/25/97	594			ug/L
MW38	Nickel	9/25/97	12		B	ug/L
MW38	Potassium	9/25/97	959	J	BE	ug/L
MW38	Vanadium	9/25/97	14		B	ug/L
MW38	Zinc	9/25/97	56			ug/L
MW39	Aluminum	9/25/97	366			ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
 American Chemical Services  
 Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW39	Barium	9/25/97	78		B	ug/L
MW39	Calcium	9/25/97	110000			ug/L
MW39	Chromium	9/25/97	7		B	ug/L
MW39	Iron	9/25/97	7300			ug/L
MW39	Magnesium	9/25/97	19200			ug/L
MW39	Manganese	9/25/97	802			ug/L
MW39	Nickel	9/25/97	7		B	ug/L
MW39	Potassium	9/25/97	8190	J	E	ug/L
MW39	Sodium	9/25/97	123000			ug/L
MW40	Aluminum	9/29/97	2140			ug/L
MW40	Barium	9/29/97	24		B	ug/L
MW40	Calcium	9/29/97	34100			ug/L
MW40	Chromium	9/29/97	5		B	ug/L
MW40	Cobalt	9/29/97	3		B	ug/L
MW40	Copper	9/29/97	21		B	ug/L
MW40	Iron	9/29/97	6430			ug/L
MW40	Magnesium	9/29/97	14100			ug/L
MW40	Manganese	9/29/97	198			ug/L
MW40	Nickel	9/29/97	10		B	ug/L
MW40	Potassium	9/29/97	2220	J	BE	ug/L
MW40	Vanadium	9/29/97	12		B	ug/L
MW41	Aluminum	9/29/97	486			ug/L
MW41	Barium	9/29/97	28		B	ug/L
MW41	Calcium	9/29/97	55200			ug/L
MW41	Chromium	9/29/97	7		B	ug/L
MW41	Cobalt	9/29/97	1		B	ug/L
MW41	Copper	9/29/97	12		B	ug/L
MW41	Lead	9/29/97	3			ug/L
MW41	Magnesium	9/29/97	18500			ug/L
MW41	Manganese	9/29/97	280			ug/L
MW41	Nickel	9/29/97	8		B	ug/L
MW41	Potassium	9/29/97	964	J	BE	ug/L
MW41	Vanadium	9/29/97	1		B	ug/L
MW42	Aluminum	9/26/97	1880			ug/L
MW42	Arsenic	9/26/97	13			ug/L
MW42	Barium	9/26/97	97		B	ug/L
MW42	Calcium	9/26/97	118000			ug/L
MW42	Chromium	9/26/97	14			ug/L
MW42	Cobalt	9/26/97	2		B	ug/L
MW42	Copper	9/26/97	22		B	ug/L
MW42	Iron	9/26/97	11100			ug/L
MW42	Magnesium	9/26/97	44400			ug/L
MW42	Manganese	9/26/97	697			ug/L
MW42	Nickel	9/26/97	12		B	ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
**American Chemical Services**  
**Griffith, Indiana**

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW42	Potassium	9/26/97	2350	J	BE	ug/L
MW42	Sodium	9/26/97	18000			ug/L
MW42	Vanadium	9/26/97	4		B	ug/L
MW43	Aluminum	9/26/97	12700			ug/L
MW43	Arsenic	9/26/97	81			ug/L
MW43	Barium	9/26/97	128		B	ug/L
MW43	Beryllium	9/26/97	2		B	ug/L
MW43	Cadmium	9/26/97	1		B	ug/L
MW43	Calcium	9/26/97	134000			ug/L
MW43	Chromium	9/26/97	95			ug/L
MW43	Cobalt	9/26/97	20		B	ug/L
MW43	Copper	9/26/97	75			ug/L
MW43	Iron	9/26/97	47500			ug/L
MW43	Lead	9/26/97	33			ug/L
MW43	Magnesium	9/26/97	63600			ug/L
MW43	Manganese	9/26/97	857			ug/L
MW43	Nickel	9/26/97	82			ug/L
MW43	Potassium	9/26/97	5610	J	E	ug/L
MW43	Selenium	9/26/97	2		B	ug/L
MW43	Vanadium	9/26/97	31		B	ug/L
MW43	Zinc	9/26/97	104			ug/L
MW44	Aluminum	9/29/97	457			ug/L
MW44	Arsenic	9/29/97	11			ug/L
MW44	Barium	9/29/97	112		B	ug/L
MW44	Calcium	9/29/97	83300			ug/L
MW44	Copper	9/29/97	4		B	ug/L
MW44	Iron	9/29/97	2510			ug/L
MW44	Magnesium	9/29/97	34500			ug/L
MW44	Manganese	9/29/97	44			ug/L
MW44	Potassium	9/29/97	1370	J	BE	ug/L
MW44	Sodium	9/29/97	18900	J	E	ug/L
MW45	Arsenic	9/29/97	44			ug/L
MW45	Barium	9/29/97	110		B	ug/L
MW45	Calcium	9/29/97	112000			ug/L
MW45	Cobalt	9/29/97	3		B	ug/L
MW45	Copper	9/29/97	9		B	ug/L
MW45	Iron	9/29/97	15900			ug/L
MW45	Lead	9/29/97	9			ug/L
MW45	Magnesium	9/29/97	28400			ug/L
MW45	Manganese	9/29/97	480			ug/L
MW45	Nickel	9/29/97	10		B	ug/L
MW45	Potassium	9/29/97	8350	J	E	ug/L
MW45	Sodium	9/29/97	101000	J	E	ug/L
MW46	Arsenic	9/25/97	3		B	ug/L



**Table 6**  
**Upper Aquifer Detections - September 1997**  
 American Chemical Services  
 Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW46	Barium	9/25/97	126		B	ug/L
MW46	Calcium	9/25/97	115000			ug/L
MW46	Chromium	9/25/97	2		B	ug/L
MW46	Iron	9/25/97	19000			ug/L
MW46	Magnesium	9/25/97	30900			ug/L
MW46	Manganese	9/25/97	1390			ug/L
MW46	Nickel	9/25/97	4		B	ug/L
MW46	Potassium	9/25/97	1190	J	BE	ug/L
MW46	Sodium	9/25/97	70000			ug/L
MW47	Aluminum	10/1/97	724	J	N	ug/L
MW47	Barium	10/1/97	13		B	ug/L
MW47	Calcium	10/1/97	13700			ug/L
MW47	Cobalt	10/1/97	2		B	ug/L
MW47	Copper	10/1/97	6		B	ug/L
MW47	Iron	10/1/97	569			ug/L
MW47	Lead	10/1/97	8			ug/L
MW47	Magnesium	10/1/97	3990		B	ug/L
MW47	Manganese	10/1/97	17			ug/L
MW47	Nickel	10/1/97	3		B	ug/L
MW47	Potassium	10/1/97	959	J	BE	ug/L
MW47	Vanadium	10/1/97	2		B	ug/L
MW48	Aluminum	9/29/97	330			ug/L
MW48	Arsenic	9/29/97	12			ug/L
MW48	Barium	9/29/97	141		B	ug/L
MW48	Calcium	9/29/97	107000			ug/L
MW48	Chromium	9/29/97	8		B	ug/L
MW48	Cobalt	9/29/97	4		B	ug/L
MW48	Copper	9/29/97	13		B	ug/L
MW48	Iron	9/29/97	24500			ug/L
MW48	Lead	9/29/97	8			ug/L
MW48	Magnesium	9/29/97	15100			ug/L
MW48	Manganese	9/29/97	504			ug/L
MW48	Nickel	9/29/97	19		B	ug/L
MW48	Potassium	9/29/97	8270	J	E	ug/L
MW48	Sodium	9/29/97	42700	J	E	ug/L
MW48	Vanadium	9/29/97	2		B	ug/L
MW49	Aluminum	9/24/97	1130	J	N	ug/L
MW49	Arsenic	9/24/97	37			ug/L
MW49	Barium	9/24/97	120		B	ug/L
MW49	Calcium	9/24/97	80300	J		ug/L
MW49	Chromium	9/24/97	10		B	ug/L
MW49	Cobalt	9/24/97	2		B	ug/L
MW49	Copper	9/24/97	6	J	B	ug/L
MW49	Iron	9/24/97	28200			ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
 American Chemical Services  
 Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW49	Lead	9/24/97	3			ug/L
MW49	Magnesium	9/24/97	9980	J		ug/L
MW49	Manganese	9/24/97	2210			ug/L
MW49	Nickel	9/24/97	12		B	ug/L
MW49	Potassium	9/24/97	5480	J	E	ug/L
MW49	Sodium	9/24/97	25800	J	E	ug/L
MW49	Vanadium	9/24/97	2		B	ug/L
<b>Indicator Parameters</b>						
MW18	Nitrate	9/30/97	5000			ug/L
MW18	Sulfate	9/30/97	103000			ug/L
MW18	TKN	9/30/97	0	J		ug/L
MW18	TOC	9/30/97	2000			ug/L
MW19	Ammonia-N	9/30/97	38000			ug/L
MW19	BOD	9/30/97	3000			ug/L
MW19	Sulfate	9/30/97	12000			ug/L
MW19	TKN	9/30/97	40000			ug/L
MW19	TOC	9/30/97	12000			ug/L
MW38	Ammonia-N	9/25/97	0			ug/L
MW38	BOD	9/25/97	0			ug/L
MW38	Nitrate	9/25/97	0			ug/L
MW38	Orthophosphate	9/25/97	0			ug/L
MW38	Sulfate	9/25/97	22000			ug/L
MW38	TKN	9/25/97	1000			ug/L
MW38	TOC	9/25/97	7000			ug/L
MW39	Ammonia-N	9/25/97	4000			ug/L
MW39	BOD	9/25/97	0			ug/L
MW39	Nitrate	9/25/97	0			ug/L
MW39	Orthophosphate	9/25/97	0			ug/L
MW39	Sulfate	9/25/97	7000			ug/L
MW39	TKN	9/25/97	4000			ug/L
MW39	TOC	9/25/97	5000			ug/L
MW40	Ammonia-N	9/29/97	0			ug/L
MW40	BOD	9/29/97	0			ug/L
MW40	Nitrate	9/29/97	0			ug/L
MW40	Nitrite	9/29/97	0			ug/L
MW40	Orthophosphate	9/29/97	0			ug/L
MW40	Sulfate	9/29/97	51000			ug/L
MW40	TKN	9/29/97	0			ug/L
MW40	TOC	9/29/97	3000			ug/L
MW41	Nitrate	9/30/97	0			ug/L
MW41	Sulfate	9/30/97	30000			ug/L
MW41	TKN	9/30/97	0			ug/L
MW41	TOC	9/30/97	2000			ug/L
MW45	Ammonia-N	9/30/97	1000			ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
 American Chemical Services  
 Griffith, Indiana

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW45	BOD	9/30/97	4000			ug/L
MW45	TKN	9/30/97	2000			ug/L
MW45	TOC	9/30/97	5000			ug/L
MW48	Ammonia-N	9/30/97	7000			ug/L
MW48	BOD	9/30/97	16000			ug/L
MW48	Nitrate	9/30/97	0			ug/L
MW48	TKN	9/30/97	8000			ug/L
MW48	TOC	9/30/97	12000			ug/L
<b>SVOCs</b>						
MW06	2,4-Dimethylphenol	9/23/97	3		J	ug/L
MW06	Bis(2-Chloroethyl)Ether	9/23/97	31			ug/L
MW06	Isophorone	9/23/97	2		J	ug/L
MW06	Phenol	9/23/97	60			ug/L
MW12	Chloropropane)	10/1/97	87			ug/L
MW12	Dimethylphthalate	10/1/97	3	J	J	ug/L
MW12	Phenol	10/1/97	24			ug/L
MW13	Bis(2-Ethylhexyl)Phthalate	10/1/97	2	J	J	ug/L
MW13	Phenol	10/1/97	7	J	J	ug/L
MW14	Bis(2-Ethylhexyl)Phthalate	9/29/97	3	J	J	ug/L
MW14	Phenol	9/29/97	18			ug/L
MW15	Phenol	9/23/97	26			ug/L
MW18	Phenol	9/29/97	21			ug/L
MW19	Bis(2-Chloroethyl)Ether	9/29/97	12			ug/L
MW19	Phenol	9/29/97	31			ug/L
MW39	Bis(2-Chloroethyl)Ether	9/25/97	2		J	ug/L
MW41	Phenol	9/29/97	34			ug/L
MW42	Phenol	9/26/97	41	J		ug/L
MW43	Phenol	9/26/97	75	J		ug/L
MW44	Bis(2-Ethylhexyl)Phthalate	9/29/97	15			ug/L
MW44	Dimethylphthalate	9/29/97	9	J	J	ug/L
MW44	Phenol	9/29/97	11		J	ug/L
MW45	1,2-Dichlorobenzene	9/29/97	5	J	J	ug/L
MW45	1,4-Dichlorobenzene	9/29/97	3	J	J	ug/L
MW45	Chloropropane)	9/29/97	7	J	J	ug/L
MW45	2-Methylnaphthalene	9/29/97	5	J	J	ug/L
MW45	Bis(2-Chloroethyl)Ether	9/29/97	13	J	J	ug/L
MW45	Naphthalene	9/29/97	100			ug/L
MW45	Phenol	9/29/97	50			ug/L
MW46	Bis(2-Chloroethyl)Ether	9/25/97	5		J	ug/L
MW47	Phenol	10/1/97	39			ug/L
MW48	Phenol	9/29/97	8	J	J	ug/L
MW49	Chloropropane)	9/24/97	30			ug/L
MW49	Anthracene	9/24/97	1		J	ug/L
MW49	Bis(2-Chloroethyl)Ether	9/24/97	13		J	ug/L

**Table 6**  
**Upper Aquifer Detections - September 1997**  
**American Chemical Services**  
**Griffith, Indiana**

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW49	Bis(2-Ethylhexyl)Phthalate	9/24/97	11		J	ug/L
MW49	Isophorone	9/24/97	6		J	ug/L
MW49	Phenol	9/24/97	130			ug/L
<b>VOCs</b>						
MW06	1,2-Dichloroethane	9/23/97	3		J	ug/L
MW06	1,2-Dichloroethene (total)	9/23/97	2		J	ug/L
MW06	Benzene	9/23/97	140			ug/L
MW06	Chlorobenzene	9/23/97	1		J	ug/L
MW06	Chloroethane	9/23/97	140	J		ug/L
MW06	Ethylbenzene	9/23/97	13			ug/L
MW06	Vinyl Chloride	9/23/97	4		J	ug/L
MW06	Xylene (total)	9/23/97	29			ug/L
MW12	Chlorobenzene	10/1/97	5	J	J	ug/L
MW13	Benzene	10/1/97	33			ug/L
MW13	Chloroethane	10/1/97	160			ug/L
MW13	Methylene Chloride	10/1/97	1	J	J	ug/L
MW14	Toluene	9/29/97	1	J	J	ug/L
MW15	Benzene	9/23/97	4		J	ug/L
MW19	Benzene	9/29/97	1	J	J	ug/L
MW19	Chloroethane	9/29/97	18			ug/L
MW39	1,2-Dichloroethene (total)	9/25/97	4		J	ug/L
MW39	Benzene	9/25/97	4		J	ug/L
MW39	Chloroethane	9/25/97	2		J	ug/L
MW45	Benzene	9/29/97	860			ug/L
MW45	Chlorobenzene	9/29/97	26	J	J	ug/L
MW45	Chloroethane	9/29/97	120			ug/L
MW45	Xylene (total)	9/29/97	33	J	J	ug/L
MW46	Benzene	9/25/97	2		J	ug/L
MW48	Benzene	9/29/97	9500			ug/L
MW48	Chloroethane	9/29/97	980			ug/L
MW49	Benzene	9/24/97	8200		E	ug/L
MW49	Chloroethane	9/24/97	810			ug/L

**Table 7**  
**Lower Aquifer Detections - September 1997**  
**American Chemical Services**  
**Griffith, Indiana**

Well	Analyte	Date	Result	DVQ	LQ	Unit
<b>Inorganics</b>						
MW07	Aluminum	9/24/97	1280	J	N	ug/L
MW07	Barium	9/24/97	132		B	ug/L
MW07	Calcium	9/24/97	102000	J		ug/L
MW07	Chromium	9/24/97	44			ug/L
MW07	Cobalt	9/24/97	2		B	ug/L
MW07	Copper	9/24/97	11	J	B	ug/L
MW07	Iron	9/24/97	5570			ug/L
MW07	Lead	9/24/97	4			ug/L
MW07	Magnesium	9/24/97	28600	J		ug/L
MW07	Manganese	9/24/97	205			ug/L
MW07	Nickel	9/24/97	31		B	ug/L
MW07	Potassium	9/24/97	2190	J	BE	ug/L
MW07	Sodium	9/24/97	20200	J	E	ug/L
MW07	Vanadium	9/24/97	3		B	ug/L
MW08	Aluminum	9/24/97	839	J	N	ug/L
MW08	Arsenic	9/24/97	6		B	ug/L
MW08	Barium	9/24/97	111		B	ug/L
MW08	Calcium	9/24/97	55200	J		ug/L
MW08	Chromium	9/24/97	37			ug/L
MW08	Cobalt	9/24/97	2		B	ug/L
MW08	Iron	9/24/97	3420			ug/L
MW08	Lead	9/24/97	3			ug/L
MW08	Magnesium	9/24/97	17700	J		ug/L
MW08	Manganese	9/24/97	134			ug/L
MW08	Nickel	9/24/97	23		B	ug/L
MW08	Potassium	9/24/97	1410	J	BE	ug/L
MW08	Sodium	9/24/97	13500	J	E	ug/L
MW08	Vanadium	9/24/97	2		B	ug/L
MW09	Aluminum	9/29/97	863			ug/L
MW09	Arsenic	9/29/97	3		B	ug/L
MW09	Barium	9/29/97	349			ug/L
MW09	Calcium	9/29/97	155000			ug/L
MW09	Chromium	9/29/97	12			ug/L
MW09	Cobalt	9/29/97	6		B	ug/L
MW09	Iron	9/29/97	16900			ug/L
MW09	Lead	9/29/97	3		B	ug/L
MW09	Magnesium	9/29/97	26100			ug/L
MW09	Manganese	9/29/97	219			ug/L
MW09	Nickel	9/29/97	13		B	ug/L
MW09	Potassium	9/29/97	11000	J	E	ug/L
MW09	Sodium	9/29/97	66400	J	E	ug/L
MW09	Vanadium	9/29/97	5		B	ug/L
MW10C	Aluminum	9/24/97	6990	J	N	ug/L

**Table 7**  
**Lower Aquifer Detections - September 1997**  
**American Chemical Services**  
**Griffith, Indiana**

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW10C	Arsenic	9/24/97	10			ug/L
MW10C	Barium	9/24/97	337			ug/L
MW10C	Calcium	9/24/97	141000	J		ug/L
MW10C	Chromium	9/24/97	360			ug/L
MW10C	Cobalt	9/24/97	14		B	ug/L
MW10C	Copper	9/24/97	46	J		ug/L
MW10C	Iron	9/24/97	21300			ug/L
MW10C	Lead	9/24/97	19			ug/L
MW10C	Magnesium	9/24/97	65900	J		ug/L
MW10C	Manganese	9/24/97	447			ug/L
MW10C	Nickel	9/24/97	257			ug/L
MW10C	Potassium	9/24/97	7460	J	E	ug/L
MW10C	Sodium	9/24/97	158000	J	E	ug/L
MW10C	Vanadium	9/24/97	15		B	ug/L
MW10C	Zinc	9/24/97	119	J		ug/L
MW21	Barium	10/1/97	182		B	ug/L
MW21	Calcium	10/1/97	952			ug/L
MW21	Chromium	10/1/97	8		B	ug/L
MW21	Cobalt	10/1/97	1		B	ug/L
MW21	Iron	10/1/97	2750			ug/L
MW21	Lead	10/1/97	1		B	ug/L
MW21	Magnesium	10/1/97	26400			ug/L
MW21	Manganese	10/1/97	166			ug/L
MW21	Potassium	10/1/97	4330	J	BE	ug/L
MW21	Sodium	10/1/97	38600	J	E	ug/L
MW22	Aluminum	9/29/97	579			ug/L
MW22	Barium	9/29/97	628			ug/L
MW22	Calcium	9/29/97	254000			ug/L
MW22	Chromium	9/29/97	20			ug/L
MW22	Cobalt	9/29/97	1		B	ug/L
MW22	Copper	9/29/97	125			ug/L
MW22	Iron	9/29/97	1340			ug/L
MW22	Lead	9/29/97	7			ug/L
MW22	Magnesium	9/29/97	39100			ug/L
MW22	Manganese	9/29/97	49			ug/L
MW22	Nickel	9/29/97	18		B	ug/L
MW22	Potassium	9/29/97	24700	J	E	ug/L
MW22	Sodium	9/29/97	338000	J	E	ug/L
MW23	Aluminum	9/25/97	2440			ug/L
MW23	Arsenic	9/25/97	4		B	ug/L
MW23	Barium	9/25/97	133		B	ug/L
MW23	Calcium	9/25/97	84800			ug/L
MW23	Chromium	9/25/97	19			ug/L
MW23	Cobalt	9/25/97	5		B	ug/L

**Table 7**  
**Lower Aquifer Detections - September 1997**  
**American Chemical Services**  
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Well	Analyte	Date	Result	DVQ	LQ	Unit
MW23	Copper	9/25/97	20		B	ug/L
MW23	Iron	9/25/97	11300			ug/L
MW23	Magnesium	9/25/97	23800			ug/L
MW23	Manganese	9/25/97	377			ug/L
MW23	Nickel	9/25/97	20		B	ug/L
MW23	Potassium	9/25/97	3940	J	BE	ug/L
MW23	Sodium	9/25/97	75300			ug/L
MW23	Vanadium	9/25/97	7		B	ug/L
MW24	Aluminum	9/25/97	9660			ug/L
MW24	Arsenic	9/25/97	8		B	ug/L
MW24	Barium	9/25/97	330			ug/L
MW24	Beryllium	9/25/97	1		B	ug/L
MW24	Calcium	9/25/97	161000			ug/L
MW24	Chromium	9/25/97	62			ug/L
MW24	Cobalt	9/25/97	9		B	ug/L
MW24	Copper	9/25/97	58			ug/L
MW24	Iron	9/25/97	36300			ug/L
MW24	Lead	9/25/97	17			ug/L
MW24	Magnesium	9/25/97	45700			ug/L
MW24	Manganese	9/25/97	566			ug/L
MW24	Nickel	9/25/97	44			ug/L
MW24	Potassium	9/25/97	6240	J	E	ug/L
MW24	Selenium	9/25/97	3		B	ug/L
MW24	Sodium	9/25/97	62900			ug/L
MW24	Vanadium	9/25/97	20		B	ug/L
MW24	Zinc	9/25/97	62			ug/L
MW28	Aluminum	9/23/97	2850	J	N	ug/L
MW28	Arsenic	9/23/97	5		B	ug/L
MW28	Barium	9/23/97	123		B	ug/L
MW28	Beryllium	9/23/97	1		B	ug/L
MW28	Calcium	9/23/97	96800	J		ug/L
MW28	Chromium	9/23/97	71			ug/L
MW28	Cobalt	9/23/97	6		B	ug/L
MW28	Copper	9/23/97	40	J		ug/L
MW28	Iron	9/23/97	7090			ug/L
MW28	Lead	9/23/97	11			ug/L
MW28	Magnesium	9/23/97	39700	J		ug/L
MW28	Manganese	9/23/97	169			ug/L
MW28	Nickel	9/23/97	49			ug/L
MW28	Potassium	9/23/97	2980	J	BE	ug/L
MW28	Sodium	9/23/97	16400	J	E	ug/L
MW28	Vanadium	9/23/97	7		B	ug/L
MW29	Barium	9/29/97	116		B	ug/L
MW29	Calcium	9/29/97	93500			ug/L

**Table 7**  
**Lower Aquifer Detections - September 1997**  
**American Chemical Services**  
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Well	Analyte	Date	Result	DVQ	LQ	Unit
MW29	Iron	9/29/97	5790			ug/L
MW29	Lead	9/29/97	1		B	ug/L
MW29	Magnesium	9/29/97	42500			ug/L
MW29	Manganese	9/29/97	97			ug/L
MW29	Potassium	9/29/97	2950	J	BE	ug/L
MW29	Sodium	9/29/97	73900	J	E	ug/L
MW30	Aluminum	10/1/97	1830	J	N	ug/L
MW30	Arsenic	10/1/97	4		B	ug/L
MW30	Barium	10/1/97	210			ug/L
MW30	Calcium	10/1/97	107000			ug/L
MW30	Chromium	10/1/97	50			ug/L
MW30	Cobalt	10/1/97	15		B	ug/L
MW30	Copper	10/1/97	40			ug/L
MW30	Iron	10/1/97	8590			ug/L
MW30	Lead	10/1/97	8			ug/L
MW30	Magnesium	10/1/97	49200			ug/L
MW30	Manganese	10/1/97	139			ug/L
MW30	Nickel	10/1/97	59			ug/L
MW30	Potassium	10/1/97	3260	J	BE	ug/L
MW30	Sodium	10/1/97	36600			ug/L
MW30	Vanadium	10/1/97	4		B	ug/L
MW31	Aluminum	9/24/97	1890	J	N	ug/L
MW31	Arsenic	9/24/97	8		B	ug/L
MW31	Barium	9/24/97	245			ug/L
MW31	Calcium	9/24/97	94900	J		ug/L
MW31	Chromium	9/24/97	89			ug/L
MW31	Cobalt	9/24/97	4		B	ug/L
MW31	Copper	9/24/97	44	J		ug/L
MW31	Iron	9/24/97	6230			ug/L
MW31	Lead	9/24/97	8			ug/L
MW31	Magnesium	9/24/97	34100	J		ug/L
MW31	Manganese	9/24/97	174			ug/L
MW31	Nickel	9/24/97	66			ug/L
MW31	Potassium	9/24/97	2410	J	BE	ug/L
MW31	Sodium	9/24/97	19800	J	E	ug/L
MW31	Vanadium	9/24/97	4		B	ug/L
MW32	Aluminum	9/24/97	780	J	N	ug/L
MW32	Barium	9/24/97	169		B	ug/L
MW32	Calcium	9/24/97	75200	J		ug/L
MW32	Chromium	9/24/97	21			ug/L
MW32	Cobalt	9/24/97	1		B	ug/L
MW32	Copper	9/24/97	13	J	B	ug/L
MW32	Iron	9/24/97	4860			ug/L
MW32	Lead	9/24/97	4			ug/L



**Table 7**  
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Well	Analyte	Date	Result	DVQ	LQ	Unit
MW32	Magnesium	9/24/97	47500	J		ug/L
MW32	Manganese	9/24/97	78			ug/L
MW32	Nickel	9/24/97	19		B	ug/L
MW32	Potassium	9/24/97	4630	J	BE	ug/L
MW32	Sodium	9/24/97	35400	J	E	ug/L
MW32	Vanadium	9/24/97	1		B	ug/L
MW33	Arsenic	10/1/97	20			ug/L
MW33	Barium	10/1/97	1280			ug/L
MW33	Calcium	10/1/97	290000			ug/L
MW33	Chromium	10/1/97	10		B	ug/L
MW33	Cobalt	10/1/97	3		B	ug/L
MW33	Copper	10/1/97	15		B	ug/L
MW33	Iron	10/1/97	27800			ug/L
MW33	Lead	10/1/97	2		B	ug/L
MW33	Magnesium	10/1/97	65900			ug/L
MW33	Manganese	10/1/97	128			ug/L
MW33	Nickel	10/1/97	22		B	ug/L
MW33	Potassium	10/1/97	15500	J	E	ug/L
MW33	Sodium	10/1/97	178000	J	E	ug/L
MW34	Barium	9/29/97	176		B	ug/L
MW34	Calcium	9/29/97	84300			ug/L
MW34	Chromium	9/29/97	17			ug/L
MW34	Copper	9/29/97	13		B	ug/L
MW34	Iron	9/29/97	3190			ug/L
MW34	Lead	9/29/97	3		B	ug/L
MW34	Magnesium	9/29/97	51000			ug/L
MW34	Manganese	9/29/97	42			ug/L
MW34	Nickel	9/29/97	17		B	ug/L
MW34	Potassium	9/29/97	4480	J	BE	ug/L
MW34	Sodium	9/29/97	37200	J	E	ug/L
MW36	Aluminum	9/24/97	4770	J	N	ug/L
MW36	Arsenic	9/24/97	3		B	ug/L
MW36	Barium	9/24/97	242			ug/L
MW36	Calcium	9/24/97	75400	J		ug/L
MW36	Chromium	9/24/97	81			ug/L
MW36	Cobalt	9/24/97	3		B	ug/L
MW36	Copper	9/24/97	38	J		ug/L
MW36	Iron	9/24/97	9550			ug/L
MW36	Lead	9/24/97	9			ug/L
MW36	Magnesium	9/24/97	46600	J		ug/L
MW36	Manganese	9/24/97	122			ug/L
MW36	Nickel	9/24/97	68			ug/L
MW36	Potassium	9/24/97	4690	J	BE	ug/L
MW36	Sodium	9/24/97	40600	J	E	ug/L

**Table 7**  
**Lower Aquifer Detections - September 1997**  
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Well	Analyte	Date	Result	DVQ	LQ	Unit
MW36	Vanadium	9/24/97	3		B	ug/L
MW50	Aluminum	10/1/97	12000	J	N	ug/L
MW50	Arsenic	10/1/97	7		B	ug/L
MW50	Barium	10/1/97	285			ug/L
MW50	Calcium	10/1/97	191000			ug/L
MW50	Chromium	10/1/97	130			ug/L
MW50	Cobalt	10/1/97	12		B	ug/L
MW50	Copper	10/1/97	36			ug/L
MW50	Iron	10/1/97	20200			ug/L
MW50	Lead	10/1/97	14			ug/L
MW50	Magnesium	10/1/97	87400			ug/L
MW50	Manganese	10/1/97	408			ug/L
MW50	Nickel	10/1/97	105			ug/L
MW50	Potassium	10/1/97	21000	J	E	ug/L
MW50	Sodium	10/1/97	481000			ug/L
MW50	Vanadium	10/1/97	19		B	ug/L
MW50	Zinc	10/1/97	57			ug/L
MW51	Aluminum	10/1/97	1040	J	N	ug/L
MW51	Barium	10/1/97	397			ug/L
MW51	Calcium	10/1/97	138000			ug/L
MW51	Chromium	10/1/97	8		B	ug/L
MW51	Cobalt	10/1/97	2		B	ug/L
MW51	Copper	10/1/97	7		B	ug/L
MW51	Iron	10/1/97	8660			ug/L
MW51	Magnesium	10/1/97	61600			ug/L
MW51	Manganese	10/1/97	128			ug/L
MW51	Nickel	10/1/97	11		B	ug/L
MW51	Potassium	10/1/97	3880	J	BE	ug/L
MW51	Sodium	10/1/97	108000	J	E	ug/L
MW51	Vanadium	10/1/97	2		B	ug/L
MW52	Aluminum	9/25/97	750			ug/L
MW52	Arsenic	9/25/97	42			ug/L
MW52	Barium	9/25/97	321			ug/L
MW52	Beryllium	9/25/97	1		B	ug/L
MW52	Calcium	9/25/97	114000			ug/L
MW52	Chromium	9/25/97	9		B	ug/L
MW52	Cobalt	9/25/97	2		B	ug/L
MW52	Copper	9/25/97	10		B	ug/L
MW52	Iron	9/25/97	5340			ug/L
MW52	Magnesium	9/25/97	44100			ug/L
MW52	Manganese	9/25/97	207			ug/L
MW52	Nickel	9/25/97	12		B	ug/L
MW52	Potassium	9/25/97	3640	J	BE	ug/L
MW52	Selenium	9/25/97	2		B	ug/L

**Table 7**  
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Well	Analyte	Date	Result	DVQ	LQ	Unit
MW52	Sodium	9/25/97	145000			ug/L
MW52	Vanadium	9/25/97	2		B	ug/L
MW53	Aluminum	9/25/97	7490			ug/L
MW53	Antimony	9/25/97	2		B	ug/L
MW53	Arsenic	9/25/97	10			ug/L
MW53	Barium	9/25/97	1520			ug/L
MW53	Beryllium	9/25/97	2		B	ug/L
MW53	Calcium	9/25/97	230000			ug/L
MW53	Chromium	9/25/97	58			ug/L
MW53	Cobalt	9/25/97	7		B	ug/L
MW53	Copper	9/25/97	40			ug/L
MW53	Iron	9/25/97	27400			ug/L
MW53	Lead	9/25/97	17			ug/L
MW53	Magnesium	9/25/97	102000			ug/L
MW53	Manganese	9/25/97	417			ug/L
MW53	Nickel	9/25/97	62			ug/L
MW53	Potassium	9/25/97	29000	J	E	ug/L
MW53	Sodium	9/25/97	380000			ug/L
MW53	Vanadium	9/25/97	4		B	ug/L
MW53	Zinc	9/25/97	79			ug/L
MW54	Aluminum	9/24/97	1980	J	N	ug/L
MW54	Arsenic	9/24/97	5		B	ug/L
MW54	Barium	9/24/97	153		B	ug/L
MW54	Calcium	9/24/97	126000	J		ug/L
MW54	Chromium	9/24/97	46			ug/L
MW54	Cobalt	9/24/97	3		B	ug/L
MW54	Copper	9/24/97	39	J		ug/L
MW54	Iron	9/24/97	5480			ug/L
MW54	Lead	9/24/97	6			ug/L
MW54	Magnesium	9/24/97	52000	J		ug/L
MW54	Manganese	9/24/97	256			ug/L
MW54	Nickel	9/24/97	37		B	ug/L
MW54	Potassium	9/24/97	2750	J	BE	ug/L
MW54	Sodium	9/24/97	28700	J	E	ug/L
MW54	Vanadium	9/24/97	3		B	ug/L
MW55	Aluminum	9/24/97	6100	J	N	ug/L
MW55	Arsenic	9/24/97	6		B	ug/L
MW55	Barium	9/24/97	219			ug/L
MW55	Beryllium	9/24/97	1		B	ug/L
MW55	Calcium	9/24/97	78200	J		ug/L
MW55	Chromium	9/24/97	60			ug/L
MW55	Cobalt	9/24/97	4		B	ug/L
MW55	Copper	9/24/97	54	J		ug/L
MW55	Iron	9/24/97	5850			ug/L

**Table 7**  
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Well	Analyte	Date	Result	DVQ	LQ	Unit
MW55	Lead	9/24/97	17			ug/L
MW55	Magnesium	9/24/97	47700	J		ug/L
MW55	Manganese	9/24/97	388			ug/L
MW55	Nickel	9/24/97	61			ug/L
MW55	Potassium	9/24/97	6660	J	E	ug/L
MW55	Sodium	9/24/97	49500	J	E	ug/L
MW55	Vanadium	9/24/97	5		B	ug/L
<b>SVOCs</b>						
MW07	Phenol	9/24/97	48			ug/L
MW08	Bis(2-Chloroethyl)Ether	9/24/97	4		J	ug/L
MW08	Phenol	9/24/97	140			ug/L
MW09	Bis(2-Chloroethyl)Ether	9/29/97	35			ug/L
MW09	Isophorone	9/29/97	1	J	J	ug/L
MW10C	Bis(2-Ethylhexyl)Phthalate	9/24/97	8		J	ug/L
MW10C	Isophorone	9/24/97	1		J	ug/L
MW10C	Phenol	9/24/97	20			ug/L
MW21	Phenol	10/1/97	20			ug/L
MW22	Phenol	9/29/97	330			ug/L
MW28	Phenol	9/23/97	37	J		ug/L
MW29	Bis(2-Ethylhexyl)Phthalate	9/29/97	6	J	J	ug/L
MW29	Phenol	9/29/97	43			ug/L
MW30	Phenol	10/1/97	17			ug/L
MW31	Bis(2-Ethylhexyl)Phthalate	9/24/97	6		J	ug/L
MW31	Phenol	9/24/97	130			ug/L
MW32	Bis(2-Chloroethyl)Ether	9/24/97	2		J	ug/L
MW32	Bis(2-Ethylhexyl)Phthalate	9/24/97	10		J	ug/L
MW32	Phenol	9/24/97	110			ug/L
MW33	Bis(2-Ethylhexyl)Phthalate	10/1/97	76			ug/L
MW33	Isophorone	10/1/97	1	J	J	ug/L
MW33	Phenol	10/1/97	65			ug/L
MW34	Bis(2-Ethylhexyl)Phthalate	9/29/97	0		J	ug/L
MW34	Phenol	9/29/97	340			ug/L
MW36	Bis(2-Ethylhexyl)Phthalate	9/24/97	6		J	ug/L
MW36	Phenol	9/24/97	240			ug/L
MW50	Phenol	10/1/97	340			ug/L
MW51	Phenol	10/1/97	18			ug/L
MW53	Isophorone	9/25/97	5		J	ug/L
MW53	Phenol	9/25/97	50	J		ug/L
MW54	Phenol	9/24/97	160			ug/L
MW55	Bis(2-Ethylhexyl)Phthalate	9/24/97	32			ug/L
MW55	Phenol	9/24/97	7		J	ug/L
<b>VOCs</b>						
MW07	Toluene	9/24/97	1		J	ug/L
MW09	Benzene	9/29/97	290			ug/L

**Table 7**  
**Lower Aquifer Detections - September 1997**  
**American Chemical Services**  
**Griffith, Indiana**

Well	Analyte	Date	Result	DVQ	LQ	Unit
MW09	Chloroethane	9/29/97	1800			ug/L
MW10C	Chloroethane	9/24/97	420			ug/L
MW33	Benzene	10/1/97	1	J	J	ug/L
MW34	Toluene	9/29/97	1	J	J	ug/L
MW53	4-Methyl-2-Pentanone	9/25/97	5	J	J	ug/L
MW53	Benzene	9/25/97	2		J	ug/L
MW53	Toluene	9/25/97	1		J	ug/L
MW55	Toluene	9/24/97	1		J	ug/L

**Table 8**  
**Summary of Residential Well Sampling Results -- October 1997**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Parameter	ACS-PWD-02 10/2/97 CONC LOD/DO RDL	ACS-PWK-02 10/2/97 CONC LOD/DO RDL	ACS-PWRC-02 10/2/97 CONC LOD/DO RDL	ACS-PWRE-02 10/2/97 CONC LOD/DO RDL	ACS-PWY-02 10/2/97 CONC LOD/DO RDL	ACS-PWY-92 10/2/97 CONC LOD/DO RDL	ACS-PWZ-02 10/2/97 CONC LOD/DO RDL
<b>VOLATILES (ug/l.)</b>							
Acetone	U/R 5	U/R 5	U/R 5	U/R 5	NA	U/R 5	U/R 5
Benzene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Bromochloromethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Bromodichloromethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Bromoform	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Bromomethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
2-Butanone	U/R 5	U/R 5	U/R 5	U/R 5	NA	U/R 5	U/R 5
Carbon Disulfide	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Carbon Tetrachloride	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Chlorobenzene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Chloroethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Chloroform	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Chloromethane	U/R 1	U/R 1	U/R 1	U/R 1	NA	U/R 1	U/R 1
Dibromochloromethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,2-Dibromo-3-Chloropropane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,2-Dibromoethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,2-Dichlorobenzene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,3-Dichlorobenzene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,4-Dichlorobenzene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,1-Dichloroethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,2-Dichloroethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,1-Dichloroethene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Cis-1,2-Dichloroethene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Trans-1,2-Dichloroethene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,2-Dichloropropane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Cis-1,3-Dichloropropene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Trans-1,3-Dichloropropene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Ethylbenzene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
2-Hexanone	U/ 5	U/ 5	U/ 5	U/ 5	NA	U/ 5	U/ 5
Methylene Chloride	U/ 2	U/ 2	0.2 U/ 2	0.2 U/ 2	NA	U/ 2	U/ 2
4-Methyl-2-Pentanone	U/ 5	U/ 5	U/ 5	U/ 5	NA	U/ 5	U/ 5
Styrene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,1,2,2-Tetrachloroethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Tetrachloroethene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Toluene	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,1,1-Trichloroethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
1,1,2-Trichloroethane	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Trichloroethene	U/ 1	0.2 U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Vinyl Chloride	U/ 1	U/ 1	U/ 1	U/ 1	NA	U/ 1	U/ 1
Xylene (Total)	U/ 5	U/ 5	U/ 5	U/ 5	NA	U/ 5	U/ 5

**Table 8**  
**Summary of Residential Well Sampling Results -- October 1997**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Parameter	ACS-PWD-02 10/2/97			ACS-PWK-02 10/2/97			ACS-PWRC-02 10/2/97			ACS-PWRE-02 10/2/97			ACS-PWY-02 10/2/97			ACS-PWY-92 10/2/97			ACS-PWZ-02 10/2/97		
	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL
<b>Semivolatiles (ug/L.)</b>																					
Bis(2-Chloroethyl)Ether	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Phenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2-Chlorophenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
1,3-Dichlorobenzene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
1,4-Dichlorobenzene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
1,2-Dichlorobenzene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2-Methylphenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,2'-oxybis(1-Chloropropane)	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
4-Methylphenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
N-Nitroso-Di-N-Propylamine	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Hexachloroethane	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Nitrobenzene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Isophorone	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2-Nitrophenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,4-Dimethylphenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Bis(2-Chloroethoxy)Methane	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,4-Dichlorophenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
1,2,4-Trichlorobenzene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Naphthalene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
4-Chloroaniline	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Hexachlorobutadiene	U/UJ	5		U/UJ	5		U/UJ	5		U/UJ	5		U/UJ	5		U/UJ	5		U/UJ	5	
4-Chloro-3-Methylphenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2-Methylnaphthalene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Hexachlorocyclopentadiene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,4,6-Trichlorophenol	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,4,5-Trichlorophenol	U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20	
2-Chloronaphthalene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2-Nitroaniline	U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20	
Dimethylphthalate	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Acenaphthylene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,6-Dinitrotoluene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
3-Nitroaniline	U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20	
Acenaphthene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,4-Dinitrophenol	U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20	
4-Nitrophenol	U/	20		U/	20		U/	20		U/	20		U/	20		U/	20		U/	20	
Dibenzofuran	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
2,4-Dinitrotoluene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Diethylphthalate	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
4-Chlorophenyl-phenylether	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	
Fluorene	U/	5		U/	5		U/	5		U/	5		U/	5		U/	5		U/	5	

**Table 8**  
**Summary of Residential Well Sampling Results -- October 1997**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Parameter	ACS-PWD-02 10/2/97 CONC LOD/DO RDL	ACS-PWK-02 10/2/97 CONC LOD/DO RDL	ACS-PWRC-02 10/2/97 CONC LOD/DO RDL	ACS-PWRE-02 10/2/97 CONC LOD/DO RDL	ACS-PWY-02 10/2/97 CONC LOD/DO RDL	ACS-PWY-92 10/2/97 CONC LOD/DO RDL	ACS-PWZ-02 10/2/97 CONC LOD/DO RDL
<b>Semivolatiles (ug/L) (continued)</b>							
4-Nitroaniline	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20
4,6-Dinitro-2-Methylphenol	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20
N-Nitrosodiphenylamine	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
4-Bromophenyl-phenylether	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Hexachlorobenzene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Pentachlorophenol	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20	U/ 20
Phenanthrene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Anthracene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Carbazole	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Di-N-Butylphthalate	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Fluoranthene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Pyrene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Butylbenzylphthalate	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
3,3'-Dichlorobenzidine	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Benzo(a)Anthracene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Chrysene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Bis(2-Ethylhexyl)Phthalate	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Di-N-Octylphthalate	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Benzo(b)Fluoranthene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Benzo(k)Fluoranthene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Benzo(a)Pyrene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Indeno(1,2,3-Cd)Pyrene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Dibenz(A,H)Anthracene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5
Benzo(G,H,I)Perylene	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5	U/ 5



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Parameter	ACS-PWD-02 10/2/97			ACS-PWK-02 10/2/97			ACS-PWRC-02 10/2/97			ACS-PWRE-02 10/2/97			ACS-PWY-02 10/2/97			ACS-PWY-92 10/2/97			ACS-PWZ-02 10/2/97		
	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL	CONC	LQ/DYQ	RDL
<b>Pesticide/PCBs (ug/L.)</b>																					
alpha-BHC	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
beta-BHC	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
delta-BHC	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
gamma-BHC (Lindane)	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
Heptachlor	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
Aldrin	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
Heptachlor epoxide	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
Endosulfan I	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
Dieldrin	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
4,4'-DDE	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
Endrin	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
Endosulfan II	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
4,4'-DDD	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
Endosulfan sulfate	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
4,4'-DDE	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
Methoxychlor	U/	0.1		U/	0.1		U/	0.1		U/	0.1		U/	0.1		U/	0.1		U/	0.1	
Endrin ketone	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
Endrin aldehyde	U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02		U/	0.02	
alpha-Chlordane	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
gamma-Chlordane	U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01		U/	0.01	
Toxaphene	U/	1		U/	1		U/	1		U/	1		U/	1		U/	1		U/	1	
Aroclor-1016	U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2	
Aroclor-1221	U/	0.4		U/	0.4		U/	0.4		U/	0.4		U/	0.4		U/	0.4		U/	0.4	
Aroclor-1232	U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2	
Aroclor-1242	U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2	
Aroclor-1248	U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2	
Aroclor-1254	U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2	
Aroclor-1260	U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2		U/	0.2	

**Table 8**  
**Summary of Residential Well Sampling Results -- October 1997**  
**American Chemical Service NPL Site**  
**Griffith, Indiana**

Parameter	ACS-PWD-02 10/2/97 CONC LO/DYQ RDL	ACS-PWK-02 10/2/97 CONC LO/DYQ RDL	ACS-PWRC-02 10/2/97 CONC LO/DYQ RDL	ACS-PWRE-02 10/2/97 CONC LO/DYQ RDL	ACS-PWY-02 10/2/97 CONC LO/DYQ RDL	ACS-PWY-92 10/2/97 CONC LO/DYQ RDL	ACS-PWZ-02 10/2/97 CONC LO/DYQ RDL
<b>Metals (ug/l.)</b>							
Aluminum	BN/UJ 11.7	103 BN/J 10	UN/UJ 10	UN/UJ 10	UN/UJ 10	UN/UJ 10	UN/UJ 10
Antimony	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1
Arsenic	U/ 2	U/ 2	U/ 2	U/ 2	U/ 2	U/ 2	U/ 2
Barium	150 B/ 1	48.5 B/ 1	178 B/ 1	2.7 B/ 1	131 B/ 1	132 B/ 1	13.2 B/ 1
Beryllium	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1
Cadmium	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1
Calcium	95300 / 8	89500 / 8	96800 / 8	1470 B/ 8	80600 / 8	82900 / 8	45100 / 8
Chromium	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	B/U 3.8	U/ 1
Cobalt	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1
Copper	71.2 / 1	102 / 1	3 B/ 1	12.1 B/ 1	2.7 B/ 1	1.3 B/ 1	14.2 B/ 1
Iron	2750 / 6	150 / 6	2270 / 6	114 / 6	2560 / 6	2540 / 6	B/U 39.8
Lead	10.2 / 1	11.3 / 1	U/ 1	B/U 1.2	U/ 1	U/ 1	B/U 2
Magnesium	49600 / 3	30500 / 3	53900 / 3	923 B/ 3	42700 / 3	43500 / 3	16000 / 3
Manganese	46.2 / 1	854 / 1	17.3 / 1	U/ 1	29.3 / 1	28.2 / 1	U/ 1
Mercury	U/ 0.2	U/ 0.2	U/ 0.2	U/ 0.2	U/ 0.2	U/ 0.2	U/ 0.2
Nickel	4.3 B/ 1	2.7 B/ 1	1.2 B/ 1	U/ 1	5.5 B/ 1	1.3 B/ 1	1.1 B/ 1
Potassium	1950 BE/J 16	5310 E/J 16	3450 BE/J 16	2510 BE/J 16	2730 BE/J 16	2800 BE/J 16	3840 BE/J 16
Selenium	U/ 2	U/ 2	U/ 2	U/ 2	2.2 B/ 2	U/ 2	U/ 2
Silver	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1
Sodium	24100 / 22	108000 / 22	29100 / 22	191000 / 22	22300 / 22	24300 / 22	9430 / 22
Thallium	U/ 2	U/ 2	B/U 2.6	B/U 2	B/U 2.6	U/ 2	U/ 2
Vanadium	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1	U/ 1
Zinc	1140 / 1	64.8 / 1	B/U 17.3	B/U 10.1	/U 23.4	/U 26.6	158 / 1
Cyanide	U/ 10	U/ 10	U/ 10	U/ 10	U/ 10	U/ 10	U/ 10

Table 9  
Top of Clay Elevation Data  
From Soil Borings  
ACS NPL Site

**Barrier Wall Borings**

Boring Number	Coordinates		Ground Elevation (msl)	Depth To Clay (ft)	Clay Elevation (msl)
	Northing	Easting			
SB-101	6892.9	5253.7	637.9	19.5	618.4
SB-102	6873.7	5269.6	637.8	21.0	616.8
SB-103	6855.1	5287.1	637.8	21.0	616.8
SB-104	6838.3	5304.1	637.8	20.0	617.8
SB-105	6817.9	5321.3	637.8	20.0	617.8
SB-106	6802.1	5339.3	637.8	20.3	617.5
SB-107	6782.4	5356.8	637.8	19.5	618.3
SB-108	6764.6	5372.8	637.6	18.5	619.1
SB-109	7027.3	5307.5	638.0	18.5	619.5
SB-110	6751.9	5660.5	638.8	21.8	617
SB-111	6688.6	5524.4	638.4	19.0	619.4
SB-112	6935.0	5575.9	639.7	19.5	620.2
SB-113	7065.9	5422.2	637.8	17.6	620.2
SB-114	7072.6	5374.8	638.1	19.3	618.8
SB-115	7071.4	5328.2	638.3	19.8	618.5
SB-116	7054.4	5472.4	637.5	18.6	618.9
SB-117	6929.2	5219.9	637.9	18.5	619.4
SB-118	6721.5	5620.5	639.1	24.8	614.3
SB-119	6708.8	5567.4	638.8	21.7	617.1
SB-120	6742.0	5280.7	637.7	20.0	617.7
SB-121	6673.0	5476.0	638.1	21.5	616.6
SB-122	6971.7	5248.3	638.1	19.1	619
SB-123	7001.1	5274.0	638.1	19.5	618.6
SB-124	7023.1	5521.0	638.6	18.5	620.1
SB-125	6855.0	5622.8	638.4	19.0	619.4
SB-126	6907.2	5615.2	638.3	19.5	618.8
SB-127	6960.9	5599.7	638.3	19.0	619.3
SB-128	6803.1	5653.1	638.9	24.5	614.4
SB-129	6712.4	5268.4	636.9	18.5	618.4
SB-130	6652.2	5448.6	637.9	19.5	618.4
SB-131	6826.5	5088.9	636.7	18.0	618.7
SB-132	6756.4	5174.5	637.0	19.0	618
SB-133	6670.7	5352.5	637.3	20.0	617.3
SB-134	6667.5	5402.1	637.7	20.5	617.2
SB-135	6737.0	5230.1	637.1	18.5	618.6
SB-136	6903.5	5146.0	637.5	18.5	619
SB-137	6985.7	5225.5	637.6	17.5	620.1
SB-138	6636.5	5397.5	637.6	20.0	617.6
SB-139	6865.6	5117.2	637.4	18.5	618.9
SB-140	6956.3	5179.7	637.6	18.5	619.1
SB-141	6999.3	5199.7	637.6	18.5	619.1
SB-142	6885.6	5641.6	638.3	19.0	619.3
SB-143	7078.6	5430.1	637.6	19.5	618.1
SB-144	6996.0	5565.6	639.7	19.7	620
SB-145	6797.4	5603.5	639.6	23.5	616.1
SB-146	6783.8	5610.0	639.6	24.0	615.6
SB-147	6777.3	5597.9	639.7	24.0	615.7
SB-148	6785.2	5620.0	639.5	22.5	617
SB-149	6833.6	5764.9	638.2	19.5	618.7
SB-150	6452.9	5749.4	639.0	21.0	618
SB-151	6763.8	5890.1	638.8	20.0	618.8
SB-152	6606.8	5818.6	639.2	21.0	618.2

**Table 9**  
**Top of Clay Elevation Data**  
**From Soil Borings**  
**ACS NPL Site**

**Barrier Wall Borings**

Boring Number	Coordinates		Ground Elevation (msl)	Depth To Clay (ft)	Clay Elevation (msl)
	Northing	Easting			
SB-201	5674.8	4984.8	647.5	NA	NA
SB-202	6059.9	5011.5	640.4	NA	NA
SB-202A	6077.4	5014.5	639.9	22.0	617.9
SB-203	6029.0	5011.5	641.0	22.0	619
SB-204	5964.5	5012.0	641.9	21.8	620.1
SB-205	5913.8	5014.2	643.4	22.5	620.9
SB-205A	5930.6	4988.6	645.9	26.5	619.4
SB-206	5856.2	5013.4	644.6	24.0	620.6
SB-207	5801.1	4978.0	646.9	25.0	621.9
SB-208	5763.9	4960.8	646.8	25.5	621.3
SB-209	5715.5	4942.1	647.4	28.0	619.4
SB-210	5690.0	4988.9	647.2	26.0	621.2
SB-211	5663.6	5186.0	650.9	29.5	621.4
SB-212	5758.7	5453.6	649.4	28.0	621.4
SB-213	5637.8	5388.9	653.1	31.0	622.1
SB-214	5946.4	5523.4	647.2	26.0	621.2
SB-215	6126.2	5615.5	647.9	28.5	619.4
SB-216	6325.7	5662.3	645.9	26.0	619.9
SB-217	6444.1	5602.8	639.5	22.0	617.5
SB-218	6517.4	5411.0	634.7	16.0	618.7
SB-219	6606.9	5299.9	633.0	14.0	619
SB-220	6496.9	5175.7	635.4	16.0	619.4
SB-221	6353.9	5138.1	634.0	13.0	621
SB-222	6223.4	5069.4	638.6	18.5	620.1
SB-223	6729.8	5059.2	638.5	20.0	618.5
SB-224	6197.5	5301.8	646.9	27.0	619.9
SB-225	6208.5	5283.1	647.3	27.0	620.3
SB-226	6192.7	5286.9	647.5	27.0	620.5
SB-227	6212.0	5297.6	646.9	27.1	619.8

Table 9  
Top of Clay Elevation Data  
From Soil Borings  
ACS NPL Site

Monitoring Wells

Boring Number	Coordinates		Ground Elevation (msl)	Depth To Clay (ft)	Clay Elevation (msl)
	Northing	Easting			
MW-01	5783	4305	635.7	15	620.7
MW-02	6839	5033	634.8	19	615.8
MW-03	7314	5299	634.1	14	620.1
MW-04	7126	6112	638.2	19.5	618.7
MW-05	6482	5788	639.4	21	618.4
MW-06	5520	5298	653	32	621
MW-07	6732	6113	638.7	20.5	618.2
MW-08	7506	5934	638.2	21.2	617
MW-09	6990	4893	635.9	16.6	619.3
MW-10	7784	5200	633	13.8	619.2
MW-10A	NS	NS	634.3	15.5	618.8
MW-10B	NS	NS	634.2	17	617.2
MW-10C	7554	5229	634.7	15.7	619
MW-11	7329	6377	637.5	20.3	617.2
MW-12	6352	6019	639.7	20.2	619.5
MW-13	7814	5050	631.9	12.8	619.1
MW-14	6995	4882	636	16.8	619.2
MW-15	5003	4721	635.2	14.9	620.3
MW-16	6596	5065	636.3	16.8	619.5
MW-18	5746	5836	645.4	20	625.4
LW-01	5070	4807	642.4	23	619.4
LW-02	5465	4662	647.4	26	621.4
MW-21	7067	4546	631.3	13	618.3
MW-22	4898	5208	634.3	20.5	613.8
MW-23	7404	4717	631.1	11.5	619.6
MW-24	8033	4596	633.1	15	618.1
MW-28	5696	5657	649	27.5	621.5
MW-29	7012	4886	635.7	15	620.7
MW-30	7774	5194	632.1	13.5	618.6
MW-31	7505	5907	639.4	18.5	620.9
MW-32	7507	5902	639.5	18.5	621
MW-33	7774	5189	632	13.5	618.5
MW-34	7002	4880	635.8	15	620.8
MW-35	6542	4934	632.4	13	619.4
MW-36	6767	6164	636.2	15	621.2
PZ-42	5696	5662	649	27.5	621.5
PZ-43	5702	5662	649.1	27.5	621.6
PZ-44	6766	6170	636.1	15	621.1
MW-52	7814	4996	631.4	12.5	618.9
MW-54	7592	5590	634.6	14	620.6
MW-50	5383	5269	647.2	29.5	617.7
MW-55	7604	5595	635.3	14	621.3
MW-37	7976	5395	634	12	622
MW-38	8216	5903	633.6	11.5	622.1
MW-39	7947	6253	634	11	623
MW-40	6831	6349	636.6	13.5	623.1
MW-41	4517	6242	629.6	13	616.6
MW-41-4R	4517	6317	629	1	628
MW-41-5R	4567	6367	629	1	628
MW-41-6R	4800.5	6100	629	1.5	627.5
MW-42	3808	6264	629.3	14	615.3
MW-43	3719	5880	630.2	18	612.2
MW-44	4303	5390	630	3.5	626.5
MW-45	4388	5830	632.1	11	621.1
MW-46	7424	4526	630	11.5	618.5
MW-47	5084	5958	637.6	13	624.6
MW-48	7814	5669	632.6	11.5	621.1
MW-49	7650	5551	634.2	12.5	621.7
M-1D	5747	4359	637.1	19.5	617.6
M-2D	6495	3997	635	19	616
M-3D	6821	4144	630.5	12	618.5
M-4D	6538	4949	631.4	12.5	618.9
M-5D	7094	4171	633	11.5	621.5

**Table 10**  
**Monitoring Wells and TICs with Two or More Occurrences**  
**American Chemical Service Inc. NPL Site**  
**Griffith, Indiana**

<u>Well</u>	<u>Aquifer</u>	<u>Setting</u>	<u>TIC</u>	<u>Concentration</u> <u>(ug/L)</u>
M-1S	Upper		Ether	20
M-1S	Upper		Chloro-di-flouromethane	95
M-4S	Upper		Tetrahydrofuran	45
MW-06	Upper		Ether	29
MW-13	Upper		Ether	82
MW-14	Upper		2-ethyl-1-hexanol	28
MW-15	Upper		Chloro-di-flouromethane	17
MW-19	Upper		Ether	5
MW-19	Upper		Chloro-di-flouromethane	21
MW-41	Upper		2-ethyl-1-hexanol	5

<u>Well</u>	<u>Aquifer</u>	<u>Setting</u>	<u>TIC</u>	<u>Concentration</u> <u>(ug/L)</u>
MW-10C	Lower	Top	Ether	4,100
MW-10C	Lower	Top	Tetrahydrofuran	170
MW-21	Lower	Top	2-ethyl-1-hexanol	12
MW-22	Lower	Top	Chloro-di-flouromethane	9
MW-22	Lower	Top	2-ethyl-1-hexanol	25
MW-24	Lower	Top	2-ethyl-1-hexanol	5
MW-29	Lower	Middle	2-ethyl-1-hexanol	8
MW-30	Lower	Middle	2-ethyl-1-hexanol	7
MW-34	Lower	Bottom	2-ethyl-1-hexanol	12
MW-50	Lower	Top	2-ethyl-1-hexanol	19
MW-51	Lower	Top	Ether	12,000
MW-51	Lower	Top	Tetrahydrofuran	110
MW-52	Lower	Top	Ether	9,900
MW-52	Lower	Top	Tetrahydrofuran	72
MW-53	Lower	Bottom	Tetrahydrofuran	19

Notes:

See Appendices D and E for complete listing of data

**Table 11**  
**Groundwater Level Gauging Points**  
**American Chemical Service NPL Site**

**Lower Aquifer Wells and Piezometers**

Well Designation	Reference Points			Date:	Notes
	East	North	TOIC		
PZ44	6170	6766	638.47		
MW28	5657	5696	648.77		
PZ42	5662	5696	648.44		
PZ43	5662	5702	648.69		
MW50	5269	5383	649.43		
MW-7	6113	6732	641.46		
MW-10C	5229	7554	637.45		
MW-9R	4893	6990	639.05		
MW29	4886	7012	638.06		
MW34	4880	7002	638.14		
MW-23	4717	7404	633.31		
MW-24	4596	8033	635.22		
MW52	4996	7814	632.74		
MW53	4977	7833	632.87		
MW51	5198	7767	634.16		
MW30	5194	7774	634.25		
MW33	5189	7774	634.13		
MW54R	5590	7592	636.05		
MW55	5595	7604	636.63		
MW-8	5934	7506	640.43		
MW31	5907	7505	641.64		
MW32	5902	7507	641.84		
M-4D	4949	6538	633.32		
ATMW-4D	5297	7311	637.99		

**Table 11**  
**Groundwater Level Gauging Points**  
**American Chemical Service NPL Site**

Page 2 of 4

**Upper Aquifer Wells**

Well Designation	Reference Points			Date:	Notes
	East	North	TOIC		
MW-6	5298	5520	655.28		
MW-11	6377	7329	640.47		
MW-12	6019	6352	642.74		
MW-13	5050	7814	634.08		
MW-14	4882	6995	638.56		
MW-15	4721	5003	637.89		
MW-18	5836	5746	644.89		
MW-19	5231	4943	635.78		
MW37	5395	7976	636.78		
MW38	5903	8216	636.51		
MW39	6253	7947	637.77		
MW40	6349	6831	639.46		
MW41	6242	4517	632.74		
MW42	6264	3808	632.32		
MW43	5880	3719	633.56		
MW44	5390	4303	633.04		
MW45	5830	4388	635.35		
MW46	4526	7424	633.32		
MW47	5958	5084	640.54		
MW48	5669	7814	636.36		
MW49	5551	7650	637.00		
M-1S	4362	5743	639.09		Griffith Landfill Wells
M-4S	4953	6537	633.42		Griffith Landfill Wells

**Staff Gauges**

Well Designation	Reference Points			Date:	Notes
	East	North	TOSG		
SG-2	4423	6864	622.84		
SG-7	5403	6889	637.01		
SG-8R	5409	5252	634.70		
SG-1	5023	6196	633.50		Yes/No
SG-3	4180	7123	631.17		Yes/No
SG-5	5464	7713	633.36		Yes/No
SG-6	4495	8075	632.97		Yes/No
SG-11	5859	8245	634.62		Yes/No
SG-12	5596	7867	634.12		Yes/No



**Table 11**  
**Groundwater Level Gauging Points**  
**American Chemical Service NPL Site**

**Piezometers**

Well Designation	Reference Points			Date:	Notes
	East	North	TOC		
LW-1	4807	5070	644.57		
LW-2	4662	5465	649.70		
P-3	5453	6470	639.87		
P-4	5432	6228	639.25		Not Found
P-5	5285	6510	636.70		Buried in Brush
P-6	5150	6551	638.75		Not Found 6/97
P-7	5950	6630	643.63		
P-8	6156	6734	639.27		
P-9	6134	6994	638.88		
P-10	5413	5852	649.32		Top of inner casing cracked 3/97 & 6/97
P-11	5199	5900	649.14		Bent, free product present 3/97 & 6/97
P-12	5076	5723	650.08		Free Product in Piezometer 3/97 & 6/97
P-13	4878	5735	651.20		
P-15	5003	6187	639.93		
P-16	4673	5749	648.80		
P-17	4584	6006	654.64		Inside Griffith Landfill
P-18	4623	6224	649.84		Inside Griffith Landfill
P-22	4636	6732	634.30		
P-23	4689	7018	636.18		
P-24	5002	7178	636.06		
P-25	5131	7510	635.01		
P-26	4764	7309	634.23		
P-27	4904	7020	639.70		
P-28	5883	7486	644.53		
P-29	5738	6619	642.37		Free Product in piezometer 9/97
P-30	5626	6793	642.42		Not Found
P-31	5480	7159	641.03		
P-32	5746	7026	642.32		
P-35	5515	6572	641.44		Free Product in piezometer 9/97
P-36	5410	6851	645.89		
P-37	5330	6949	641.37		Destroyed 3/97
P-38	5149	6992	639.87		Destroyed 3/97
P-39	5940	6902	642.00		
P-40	5931	7241	638.77		New 9/97 - Installed after water level monitoring
P-41	5663	7377	637.23		New 9/97 - Installed after water level monitoring
P-49	5145	6949	638.98		New 9/97 - Installed after water level monitoring
P-50	5129	6964	639.59		Not Found
P-51	3876	6859	635.07		Not Found
P-52	4100	7845	636.66		
P-53	4597	8015	636.18		
P-54	4936	8081	638.28		
P-55	5628	7979	636.08		
P-56	6405	7665	639.46		
P-59	6389	6590	639.22		
P-60	6111	6051	640.23		
P-61	5533	5284	638.58		
P-62	5665	4945	637.06		
P-63	5483	7689	637.70		
EW-1	5113	6942	639.50		Not Found
P-64	4617	7065	634.87		
P-65	4615	7063	634.77		
P-66	4729	7034	636.02		
P-67	4732	7034	636.06		
P-68	4743	7752	634.48		
P-69	4741	7751	634.66		
P-70	4880	7680	635.38		
P-71	4876	7682	635.32		

**Table 11**  
**Groundwater Level Gauging Points**  
**American Chemical Service NPL Site**

**New Piezometers - Upper Aquifer**

Well Designation	Reference Points			Date:	Notes
	East	North	TOC		
PGCS Piezometer Sets					
P-81	5577	7581	636.19		
P-82	5577	7572	635.77		
P-83	5577	7562	635.95		
P-84	5322	7603	634.35		
P-85	5326	7594	634.08		
P-86	5329	7585	634.41		
P-87	5121	7466	633.88		
P-88	5130	7460	633.90		
P-89	5137	7454	634.02		
P-90	4881	7152	632.59		
P-91	4889	7145	632.97		
P-92	4896	7138	633.63		
BWES Piezometer Pairs					
P-93	5136	7067	638.79		
P-94	5146	7061	638.98		
P-95	5146	6532	638.58		
P-96	5156	6537	638.39		
P-97	5098	6283	638.39		
P-98	5130	6279	639.35		
P-99	5020	5945	644.35		
P-100	5031	5948	643.93		
P-101	5550	5979	650.08		
P-102	5517	5996	647.18		
P-103	5672	6248	644.97		
P-104	6267	5639	646.68		
P-105	6678	5885	638.86		
P-106	6685	5871	638.10		
P-107	5766	7339	637.42		
P-108	5757	7324	638.13		

Note

All depth measurements and elevations are in units of feet.

Table 12. Groundwater Monitoring Plan, First three years  
Upper Aquifer Wells  
American Chemical Service NPL Site

	Area of Groundwater Contamination	Well Identification	Location with Respect to Area of Groundwater Contamination	Monitoring Parameters										
				1998			1999				2000			
				2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1	North	MW-11	Side Gradient	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
2		MW-12	Side Gradient	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
3		MW40	Side Gradient	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
4		MW38	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
5		MW39	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
6		MW48	Internal	TCL/TAL	Ind	Ind	TCL/TAL	Ind	Ind	Ind	TCL/TAL	Ind	Ind	Ind
7		MW49	Internal	TCL/TAL	Ind	Ind	TCL/TAL	Ind	Ind	Ind	TCL/TAL	Ind	Ind	Ind
8		MW37	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
9	West	MW13	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
10		MW14	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
11		MW46	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
12		M-1S	Griffith Landfill	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
13		M-3S	Griffith Landfill	TCL/TAL										
14		M-4S	Griffith Landfill	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
15	South	MW18	Upgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
16		MW6	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
17		MW19	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
18		MW45	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
19		MW44	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
20		MW41	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
21		MW47	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
22		MW15	Side Gradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
23		MW42	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
24		MW43	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	

**Notes:**

**TCL/TAL:** Full scan Target Compound List and Target Analyte List Parameters

**Ind:** Indicator Parameters, including PCE, TCE, TCA, DCE, VC, chloroethane, benzene, phenol, phthalates, arsenic, and lead.  
(The need for phenols and phthalates to be determined after 2nd Quarter 1998 Sampling).

Table 13. Groundwater Monitoring Plan, First three years

Lower Aquifer Wells

American Chemical Service NPL Site

	Well Identification	Well Screen Depth in Lower Aquifer	Location with Respect to Area of GW Contamination	Monitoring Parameters										
				1998			1999				2000			
				2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
1	MW22	Upper	Upgradient	TCL/TAL										
2	MW28	Upper	Upgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
3	MW50	Upper	Upgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
4	MW7	Upper	Side Gradient	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
5	MW36	Middle	Side Gradient	TCL/TAL										
6	MW10C	Upper	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
7	MW9R	Upper	Internal	TCL/TAL	TCL/TAL	TCL/TAL	TCL/TAL	Ind	Ind	Ind	TCL/TAL	Ind	Ind	Ind
8	MW29	Middle	Internal	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
9	MW34	Lower	Internal	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
10	MW23	Upper	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
11	MW24	Upper	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
12	MW52	Upper	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
13	MW53	Lower	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
14	MW51	Upper	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
15	MW30	Middle	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
16	MW33	Lower	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
17	MW54R	Upper	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
18	MW55	Lower	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
19	MW8	Upper	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
20	MW31	Middle	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
21	MW32	Lower	Downgradient	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	
22	M-4D	Upper	Griffith Landfill	TCL/TAL		Ind	Ind		Ind		Ind		Ind	
23	ATMW-4D	Upper	ACS Site	TCL/TAL		Ind	TCL/TAL		Ind		TCL/TAL		Ind	

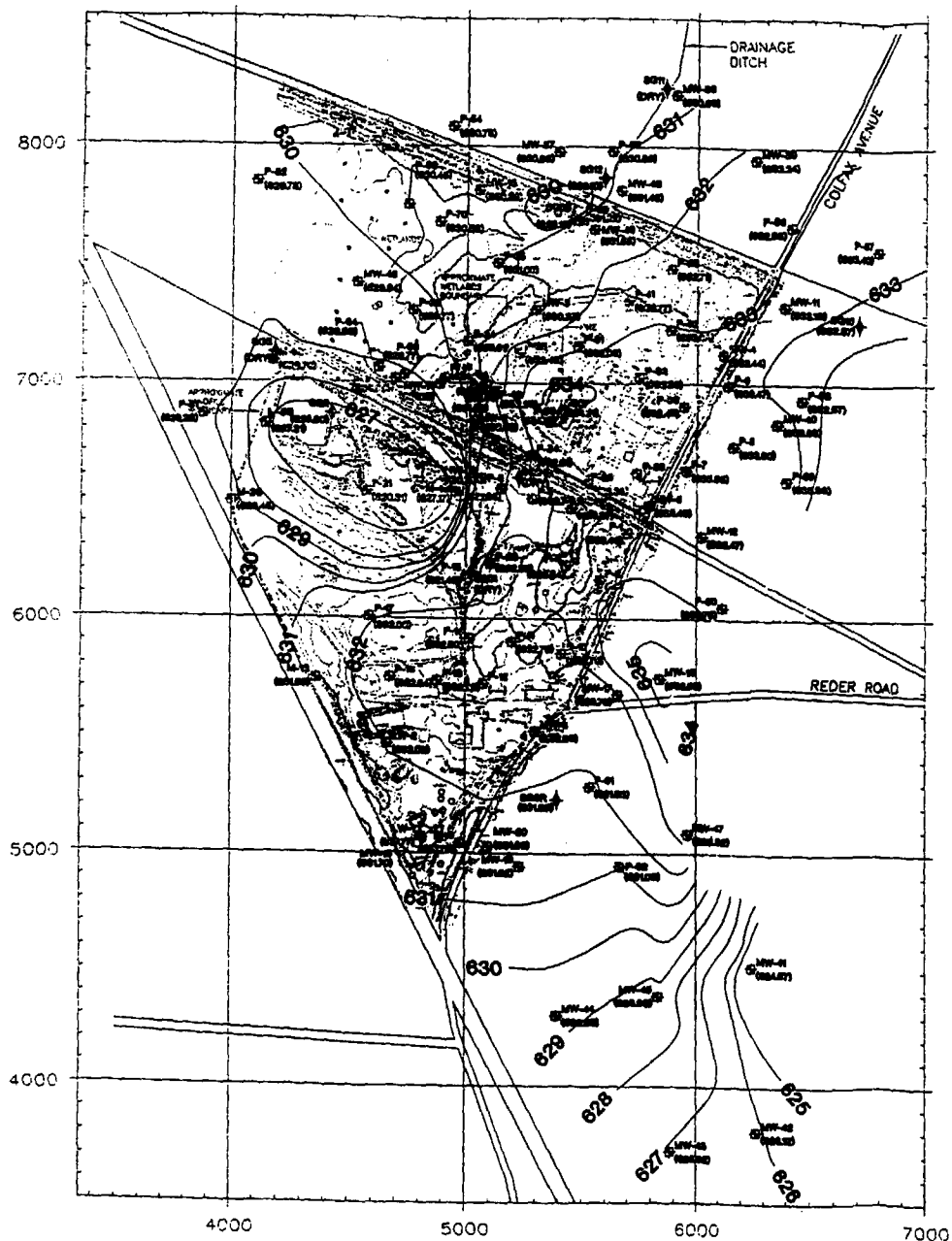
Notes:

TCL/TAL: Full scan Target Compound List and Target Analyte List Parameters

Ind: Indicator Parameters, including PCE, TCE, TCA, DCE, VC, chloroethane, benzene, phenol, phthalates, arsenic, and lead.  
(The need for phenols and phthalates to be determined after 2nd Quarter 1998 Sampling)







# **LEGEND**

- UPPER AQUIFER WELL LOCATION AND NUMBER
- LEACHATE/UPPER AQUIFER WELL LOCATION AND NUMBER
- PIEZOMETER LOCATION AND NUMBER
- STAFF GAUGE LOCATION AND NUMBER
- MEASURED WATER TABLE ELEVATION, IN FT. AMSL
- NOT MEASURED
- GROUNDWATER ELEVATION CONTOUR

# **NOTES**

1. GROUNDWATER LEVELS FOR WATER TABLE CONTOURS WERE MEASURED AT THE SITE ON NOVEMBER 4, 1996

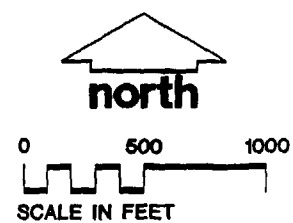


FIGURE 2

Developed By: DAP		Drawn By: CCA
Approved by: [Signature]		Date: 1/24/97
Reference:		Revisions:
UPPER AQUIFER WATER TABLE ELEVATIONS NOVEMBER 4, 1996 FIRST QUARTER GROUNDWATER MONITORING RESULTS REPORT AMERICAN CHEMICAL SERVICE, INC. NPL SITE GRIFFITH, IN-14		
Drawing Number: 4077 0074B15		
MONTGOMERY WATSON		

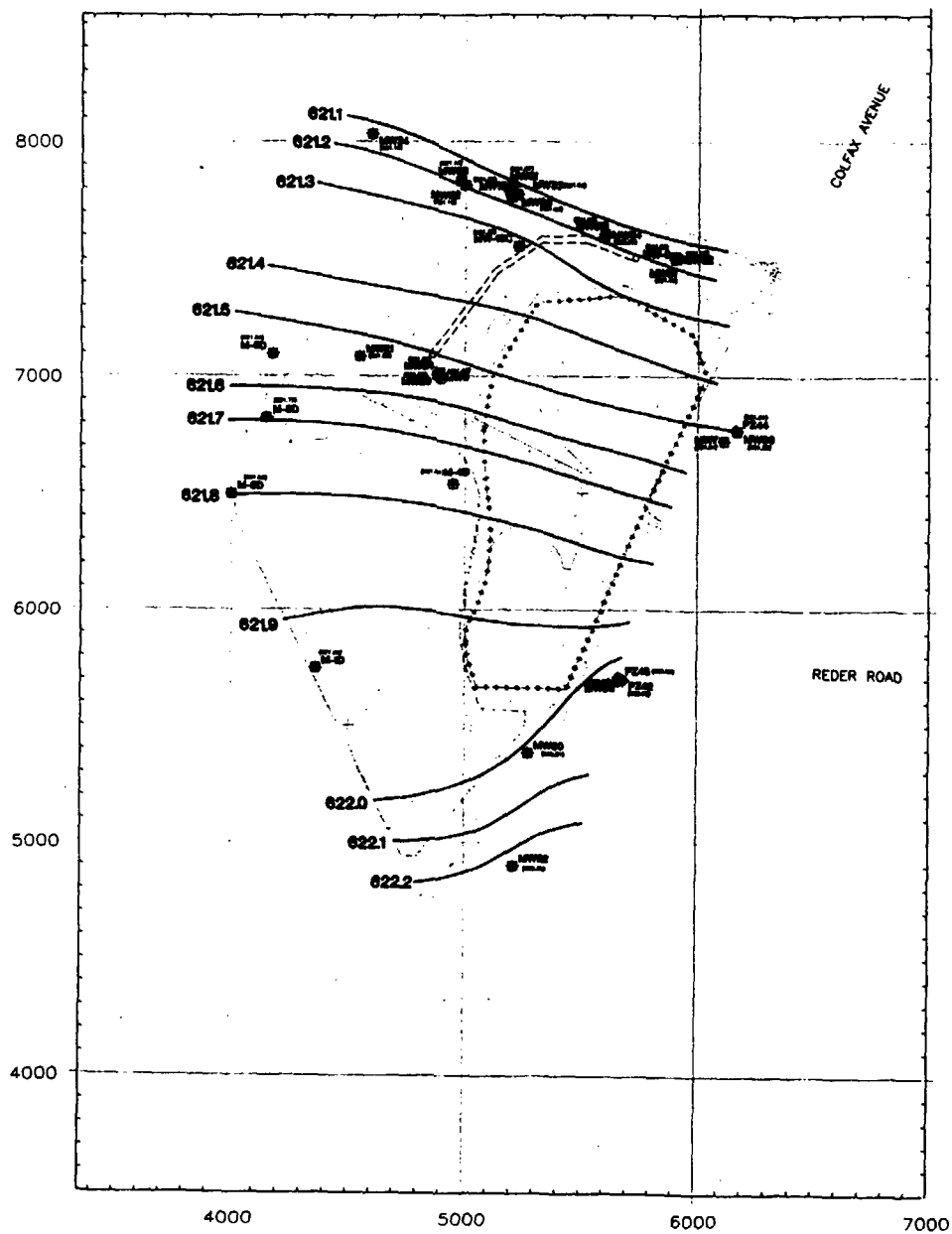


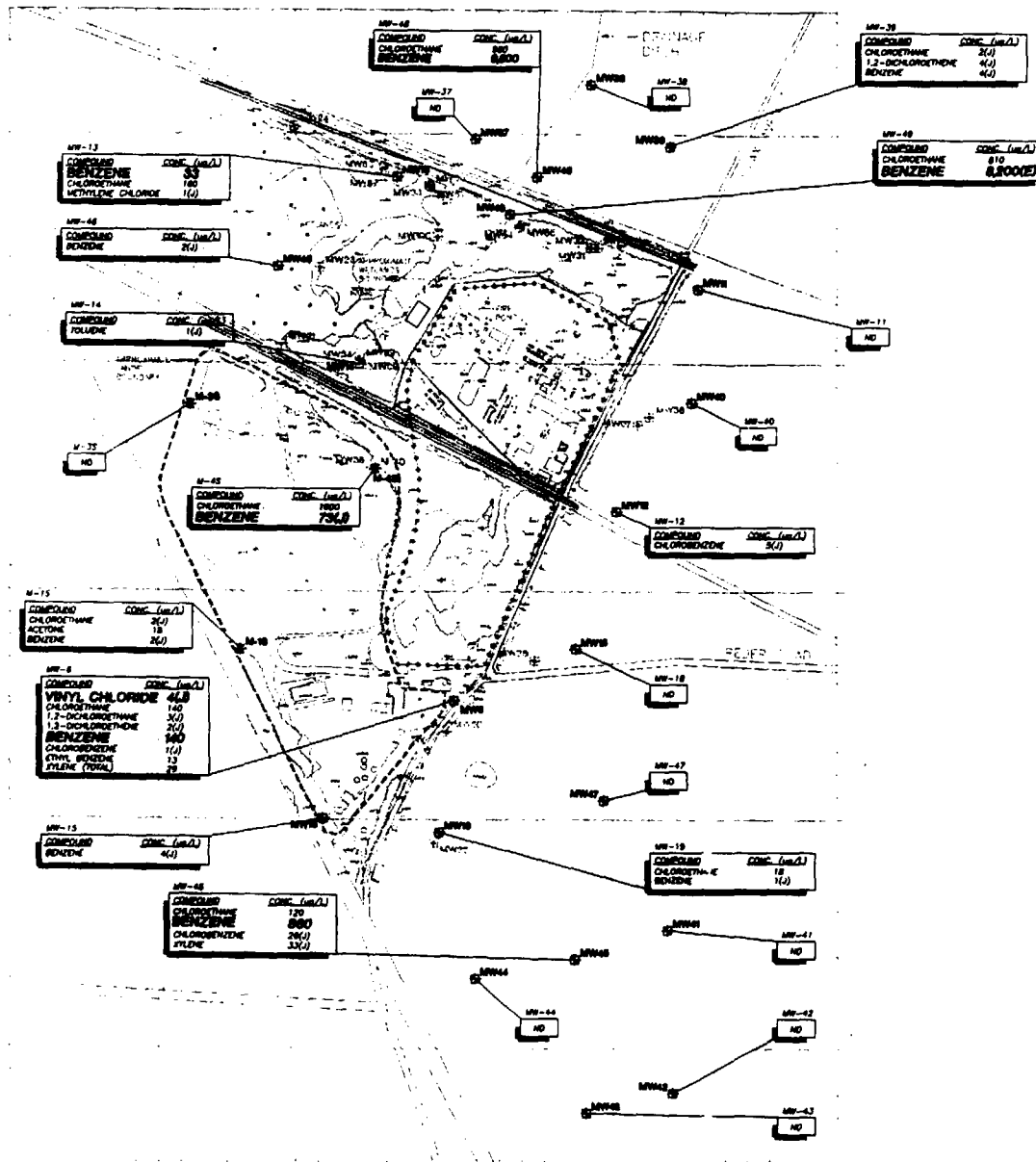
FIGURE 3

Developed By JMC  
 Drawn By JKP  
 Approved By TAB  
 Date 9/25/97  
 Reference //1252042/221602/0001.mxd  
 221602

**LOWER AQUIFER POTENTIOMETRIC SURFACE**  
 SEPTEMBER 22, 1997  
 1997 BASELINE GROUNDWATER SAMPLING RESULTS REPORT  
 AMERICAN CHEMICAL SERVICE, INC.  
 NPL SITE  
 GRIFFITH, INDIANA

Drawing Number  
 1252042  
 221602  
**B3**  
**MONTGOMERY WATSON**





# LEGEND

- UPPER AQUIFER WELL LOCATION AND DESIGNATION
- LEACHATE/LOWER AQUIFER WELL LOCATION AND DESIGNATION
- ug/L MICROGRAMS PER LITER
- (J) INDICATES AN ESTIMATED VALUE
- NO NO VOC DETECTED
- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- GRIFFITH LANDFILL BOUNDARY

# NOTE

THE CONCENTRATION (AND ASSOCIATED COMPOUND) SHOWN IN BOLD EXCEEDED ROD REMEDIATION LEVELS.

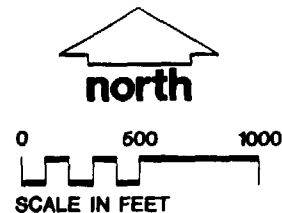


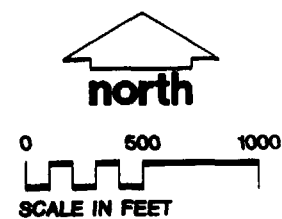
FIGURE 4




- |       |  |
|-------|--|
| ●     | LOWER AQUIFER MONITORING WELL LOCATION AND DESIGNATION |
| ■     | LEACHATE WELL LOCATION AND DESIGNATION                 |
| ug/L  | MICROGRAMS PER LITER                                   |
| (J)   | INDICATES AN ESTIMATED VALUE                           |
| NO    | NO VOC DETECTED  |
| ---   | BARRIER WALL   |
| ===== | PERIMETER GROUND WATER CONTAINMENT SYSTEM              |
| ----  | GRIFFITH LANDFILL BOUNDARY                             |

**NOTE**

THE CONCENTRATION (AND ASSOCIATED COMPOUND)  
SHOWN IN BOLD EXCEEDED ROD REMEDIATION LEVELS



**FIGURE 5**

### **VOCs DETECTED IN LOWER AQUIFER MONITORING WELLS**

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT  
AMERICAN CHEMICAL SERVICE, INC.  
NPL SITE  
GRIFFITH, INDIANA

Drawing Number  
1252.042 **B12**

**MONTGOMERY  
WATSON**

Developed By	PMS	Drawn By	CCM
Approved By	BSV	Date	7/15/17
Reference			
Revisions			

### REDER ROAD PRIVATE WELLS

Y 1002 REDER ROAD  
 A 1007 REDER ROAD  
 B 1009 REDER ROAD  
 C 1029 REDER ROAD  
 D 1033 REDER ROAD  
 T 1043 REDER ROAD  
 U 1044 REDER ROAD  
 V 1046 REDER ROAD  
 W 1048 REDER ROAD  
 R 1130 REDER ROAD

### ARBOGAST/COLEFAX ADDRESS

H 938 S. ARBOGAST  
 I 739 S. ARBOGAST  
 M 940 S. ARBOGAST  
 J 1008 S. ARBOGAST  
 K 1014 S. ARBOGAST  
 K 1016 S. ARBOGAST  
 L 1026 S. ARBOGAST

### AVENUE H/WOOD STREET ADDRESS

N 420 E. AVENUE H  
 Z 430 E. AVENUE H  
 X 1009 S. WOOD STREET

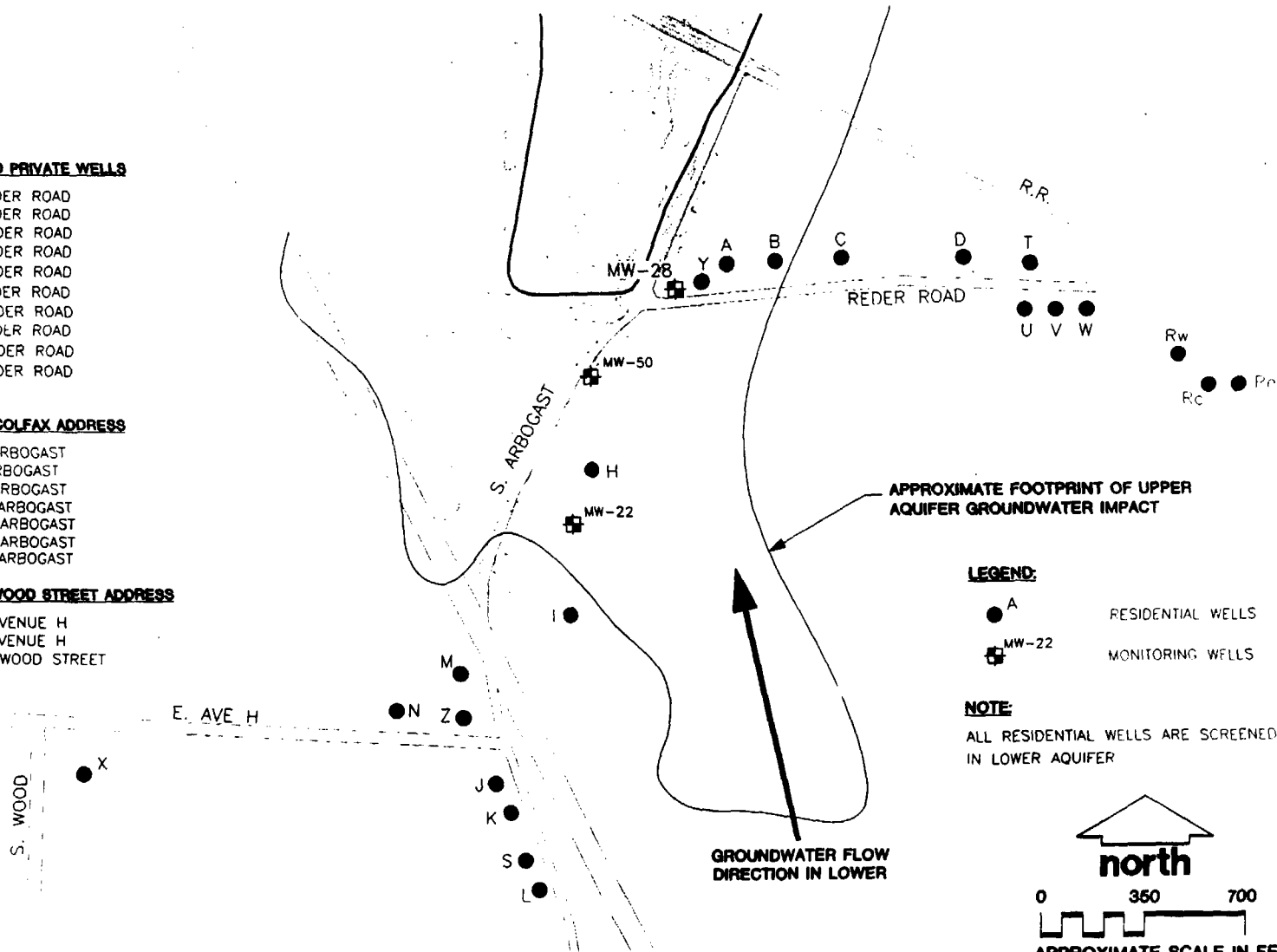
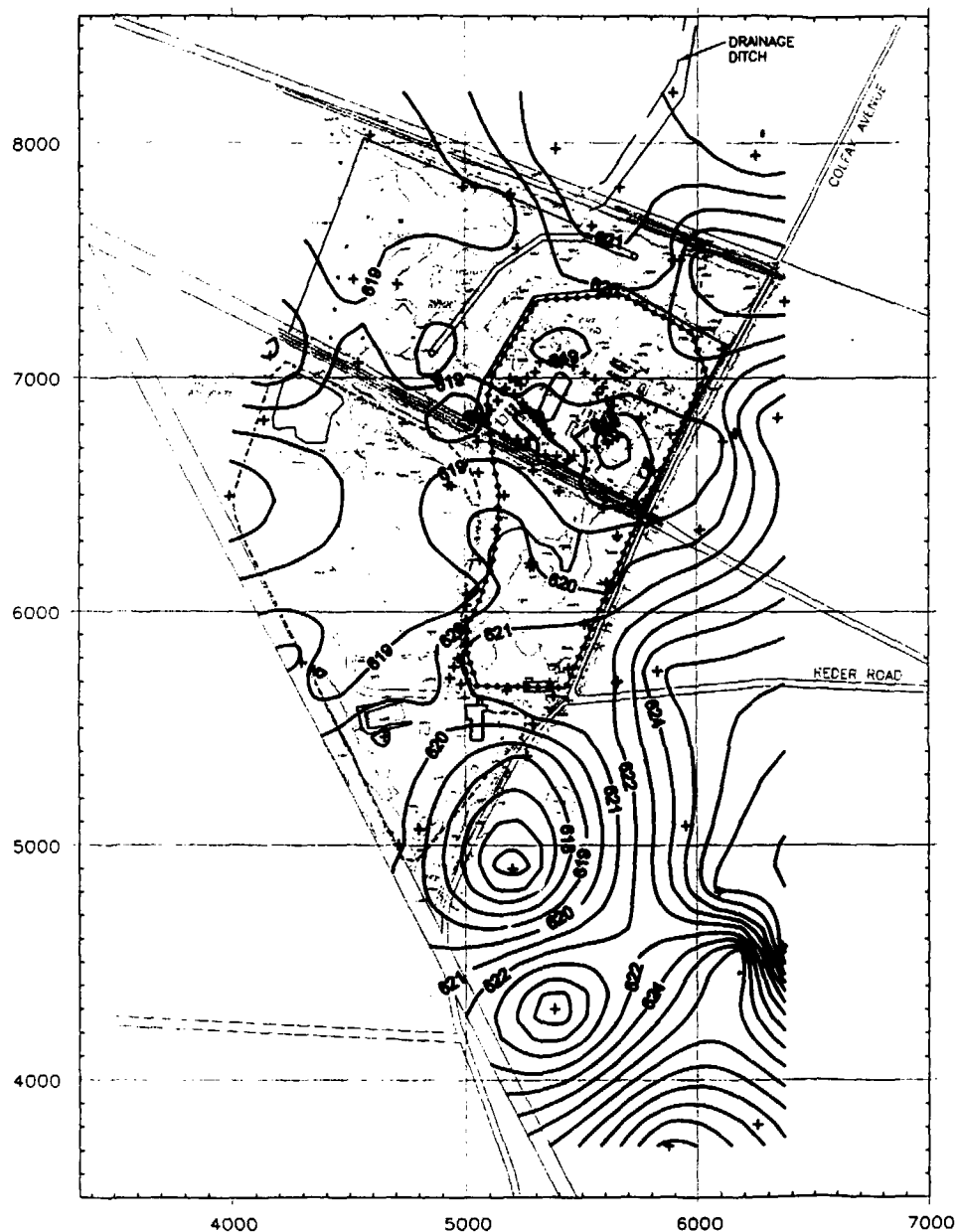


FIGURE 6





# LEGEND

- BARRIER WALL
- ===== PERIMETER GROUND WATER CONTAINMENT SYSTEM
- GRIFFITH LANDFILL BOUNDARY
- + INDICATES TOP OF CLAY ELEVATION LOCATION

## NOTE

THE TOP OF CLAY CONTOUR MAP WAS DEVELOPED BY THE KRIGING INTERPOLATION ALGORITHM IN THE SURFER™ SOFTWARE PACKAGE FROM THE ELEVATION DATA COMPILED IN TABLE 9. VALUES ARE PLOTTED ON FIGURE 9.

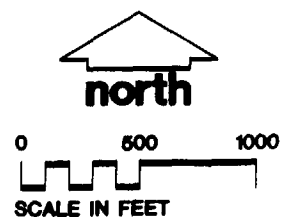


FIGURE 8

CONTOUR PLOT OF TOP-OF-CLAY SURFACE				
Developed By	TAG	Drawn By	DKP	
Approved By	TAG	Date	5/21/98	
Reference	J/1252042/MONTGOMERY/WATSON/Top of Clay Map			
Revisions				
AMERICAN CHEMICAL SERVICE, INC. NP <sub>1</sub> SITE GRIFFITH, INDIANA				
Drawing Number 1252042 221602		B1		
MONTGOMERY WATSON				



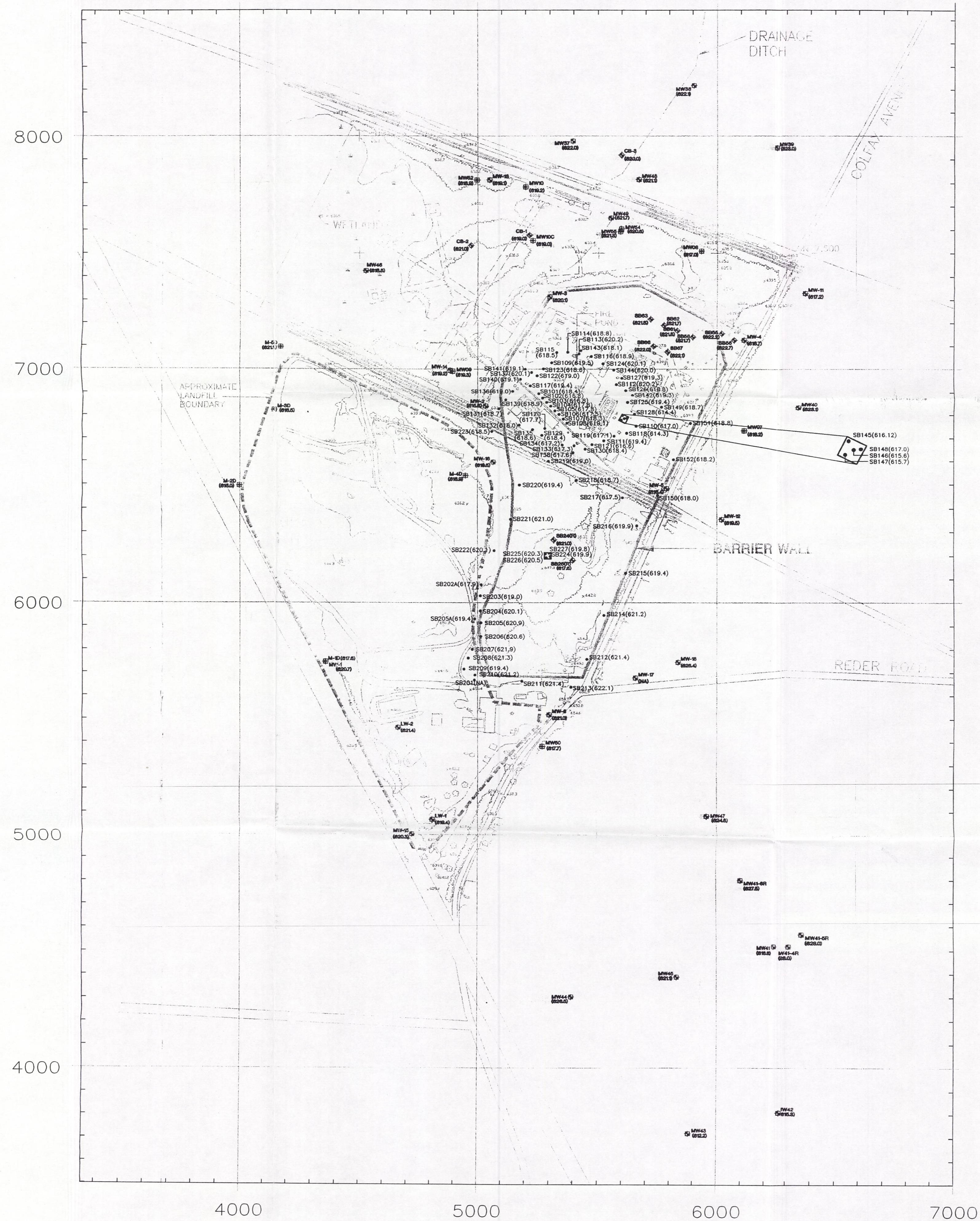
This document has been developed for a specific application and may not be used without the written approval of Montgomery Watson.

QUALITY  
CONTROL

Graphic Standards  
Lead Professional

Technical Review  
Project Manager

Management Review  
Other



#### NOTES

1. BASE MAP DEVELOPED FROM AN AERIAL SURVEY MAP OF THE SITE FLOWN ON MARCH 8, 1994 BY GEONEX CHICAGO AERIAL SURVEY, INC. CONTOUR INTERVAL = 2 ft.
2. CLAY ELEVATIONS BASED ON SOIL BORINGS AND MONITORING WELL BORINGS INSTALLED BETWEEN 1988 AND 1997 AND INCLUDED IN VARIOUS REPORTS PREPARED FOR THE ACS NPL SITE.

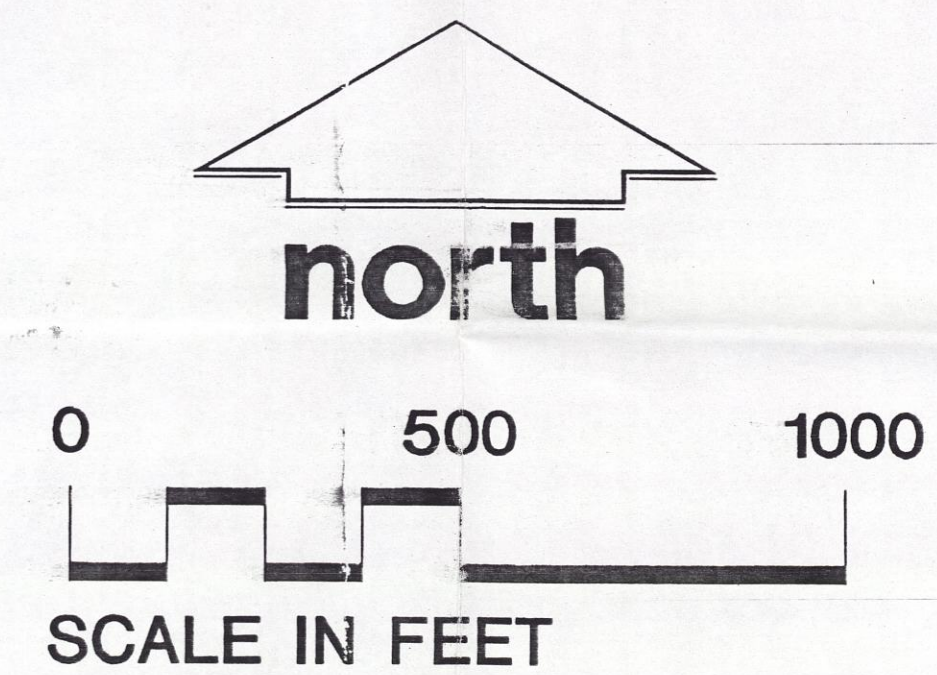


FIGURE 9

TOP OF CLAY ELEVATION MAP

Drawing Number  
1252042

**MONTGOMERY  
WATSON**



AMERICAN CHEMICAL SERVICE, INC.  
NPL SITE  
GRIFFITH, INDIANA

Developed By TAB

Drawn By DKP

Approved By

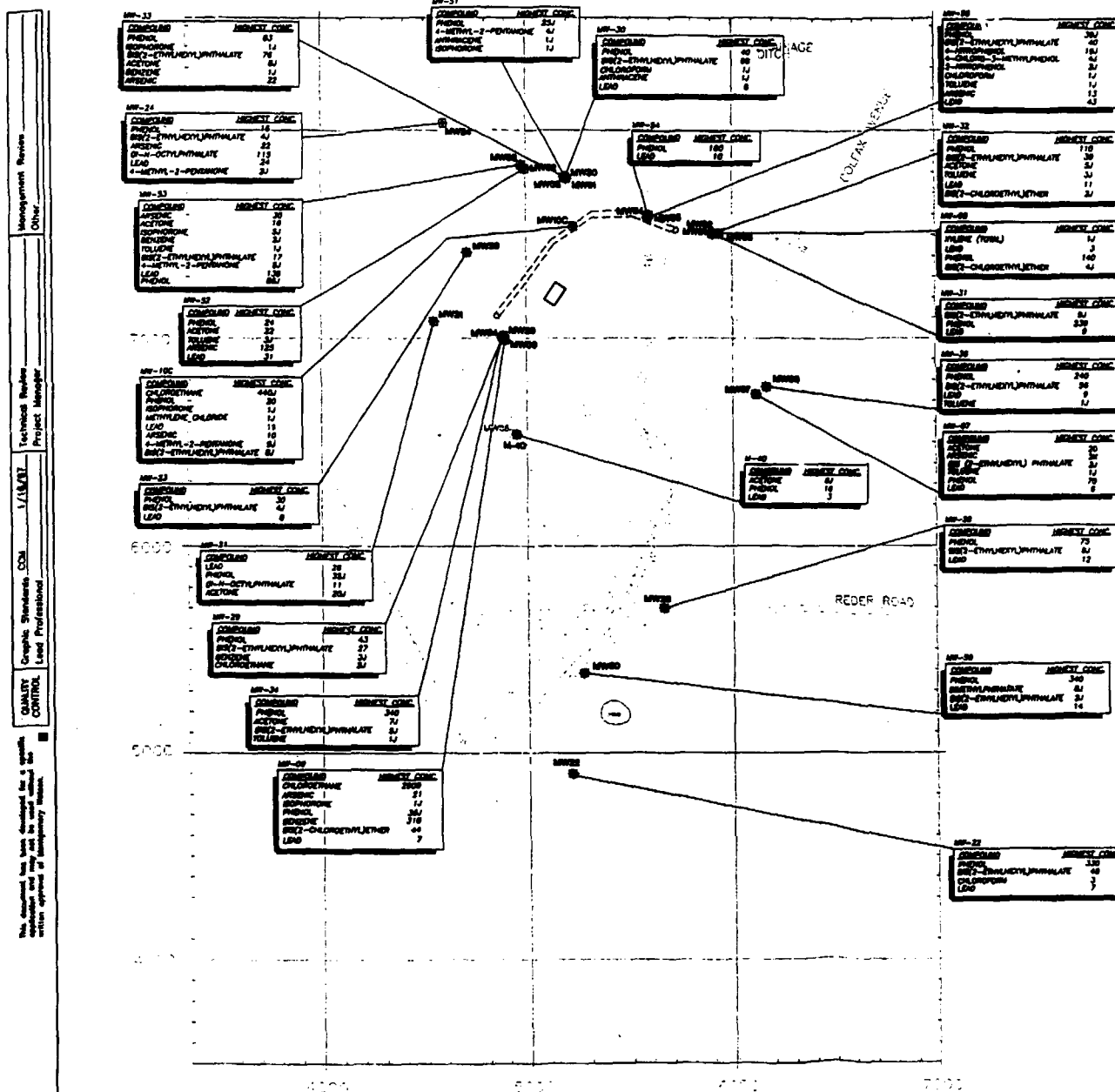
Date 5/1/98

Reference J:/1252/042/MWDWGS/TOP\_CLAY.dwg


Revisions





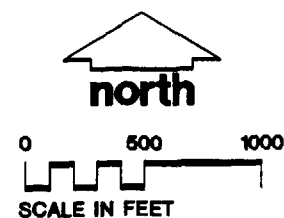


**LEGEND:**

-  LOWER AQUIFER MONITORING WELL  
 LOCATION AND DESIGNATION  
 ug/L MICROGRAMS PER LITER  
 ND NO VOCs DETECTED  
 BARRIER WALL  
 PERIMETER GROUND WATER  
 CONTAINMENT SYSTEM  
 GRIFFITH LANDFILL BOUNDARY

**NOTE:**


IF COMPOUND IS NOT SHOWN, IT WAS NOT  
DETECTED AT WELL



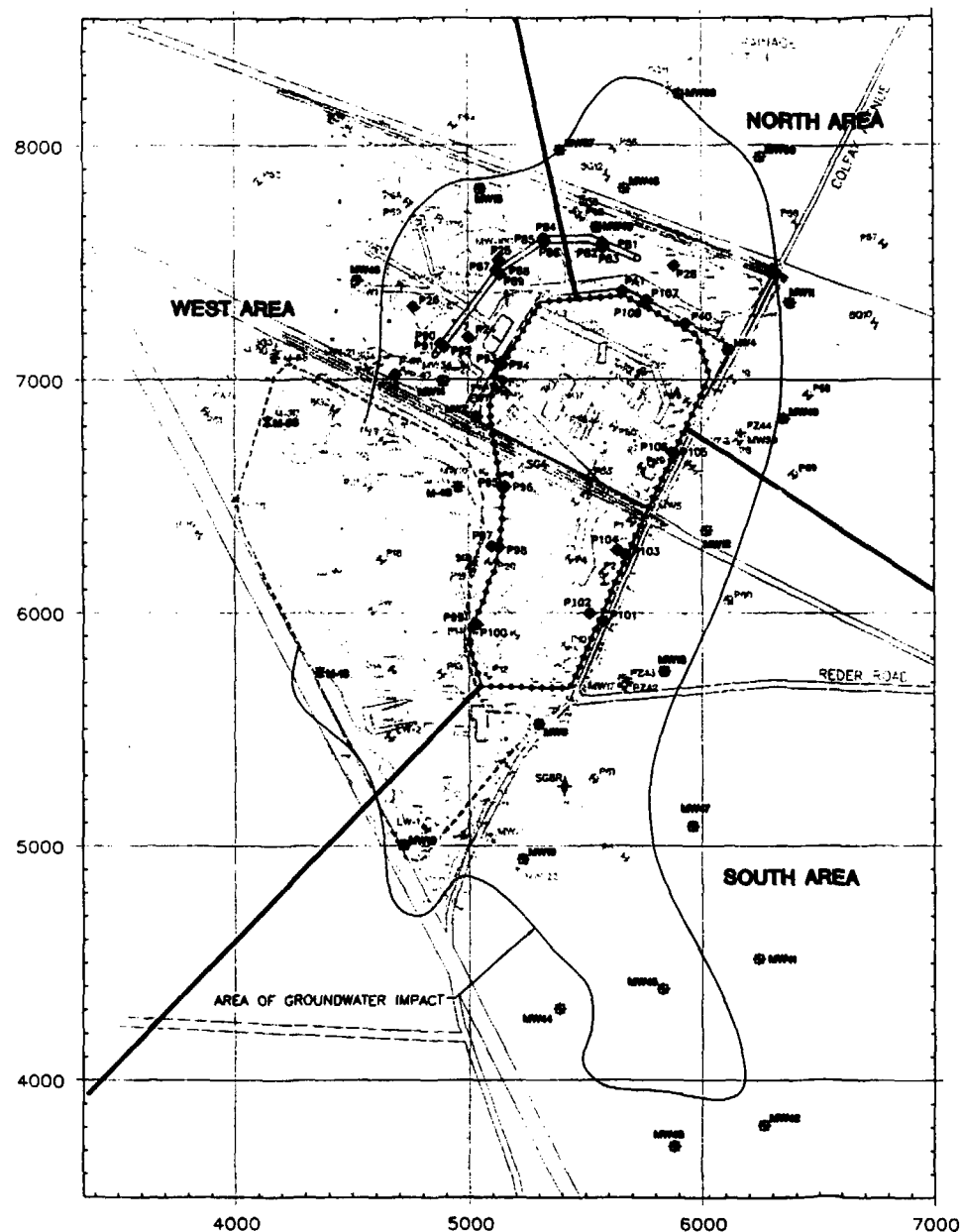
**FIGURE 11**

## LOWER AQUIFER, HIGHEST DETECTIONS

SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT  
NPL SITE  
GRIFFITH, INDIANA

Drawing Number  
1252.042 B12  
MONTGOMERY  
WATSON  




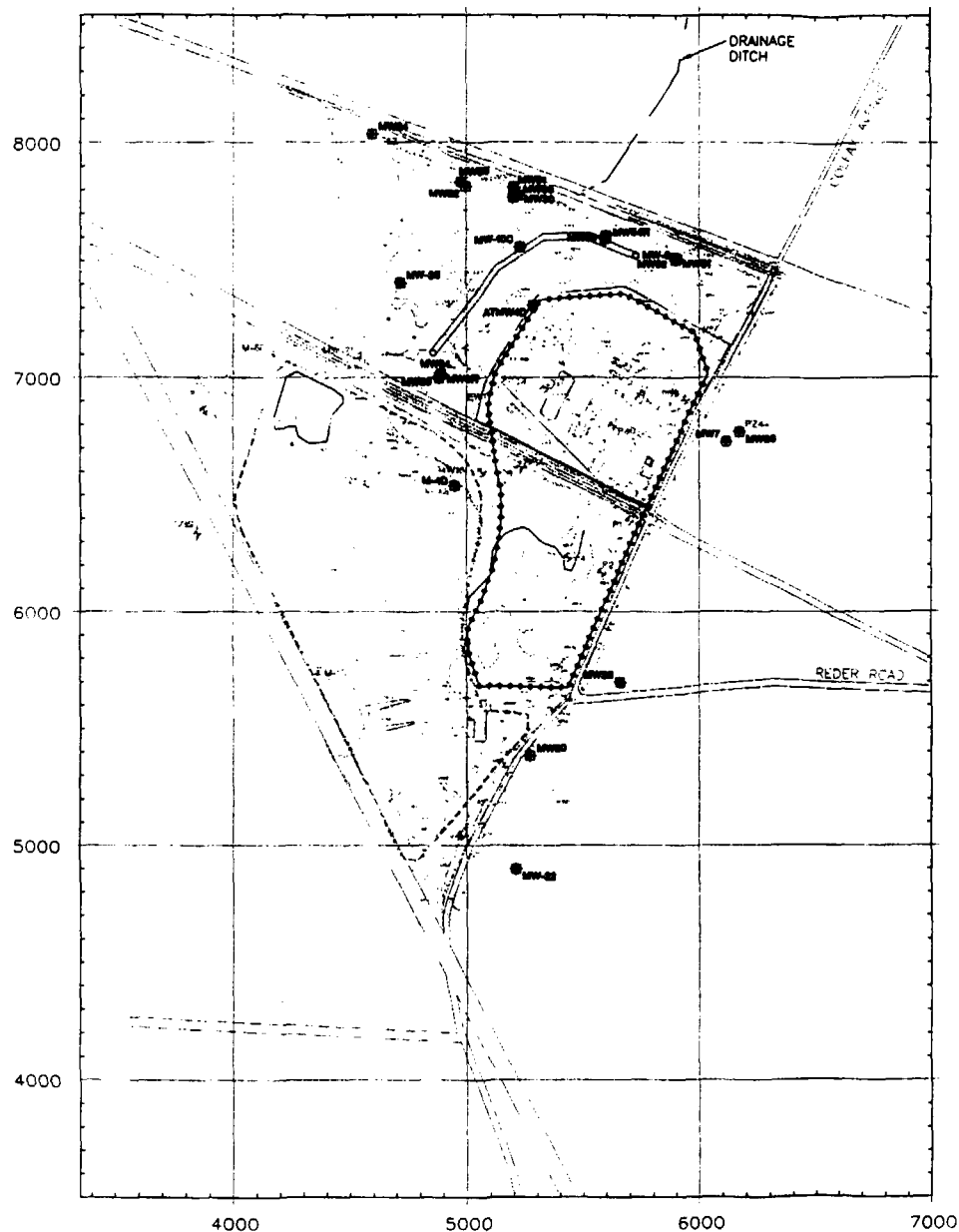


# LEGEND

- UPPER AQUIFER WELL LOCATION AND NUMBER TO BE SAMPLED AND GAUGED
- LEACHATE/UPPER AQUIFER WELL LOCATION AND DESIGNATION TO BE SAMPLED
- UPPER AQUIFER WELL LOCATION AND NUMBER TO BE GAUGED
- STAFF GAUGE TO BE GAUGED
- PIEZOMETER LOCATION AND DESIGNATION TO BE GAUGED
- MONITORING WELL NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- PIEZOMETER NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- STAFF GAUGE NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- GRIFFITH LANDFILL BOUNDARY
- NORTH/ SOUTH/ WEST AREA BOUNDARY LINES

FIGURE 12

INTERIM UPPER AQUIFER MONITORING NETWORK SEPTEMBER 1997 GROUNDWATER MONITORING RESULTS REPORT AMERICAN CHEMICAL SERVICE, INC. NPL SITE GRIFFITH, INDIANA	
Drawing Number 1252042 221602	B1 MONTGOMERY WATSON
Developed By TAB	Drawn By DKP
Approved By TAB	Date 5/21/98
Reference //1252042.dwg/1252042.dwg	Revisions



### LEGEND

- LOWER AQUIFER WELL LOCATION AND NUMBER TO BE SAMPLED
- PIEZOMETER NOT INCLUDED IN THE QUARTERLY MONITORING REPORT
- MONITORING WELL NOT INCLUDED IN THE QUARTERLY MONITORING PROGRAM
- LEACHATE/LOWER AQUIFER WELL NOT INCLUDED IN THE QUARTERLY MONITORING REPORT
- STAFF GAUGE NOT INCLUDED IN THE QUARTERLY MONITORING REPORT
- BARRIER WALL
- PERIMETER GROUND WATER CONTAINMENT SYSTEM
- GRIFFITH LANDFILL BOUNDARY

### NOTES

1. SEE TABLE 9 FOR LOWER AQUIFER WELLS TO BE GAUGED

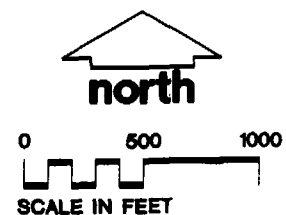


FIGURE 13

## **APPENDIX A**

### **GROUNDWATER FLOW VELOCITY CALCULATIONS**

Estimates of ACS Aquifer Test Results

Source: Table 2-4, Remedial Investigation Report (Warzyn, June 1991)

## Slug Test Results: Upper Aquifer Monitoring Wells

<b>East Side Mon Wells</b>	<b>K (cm/sec)</b>
MW-4	1.40E-03
MW-5	1.10E-03
MW-6	1.50E-03
MW-11	1.30E-03
MW-12	1.90E-03
MW-15	2.00E-03
MW-17	
MW-18	3.50E-03
	<b>1.81E-03</b>

<b>West Side Mon Wells</b>	<b>K (cm/sec)</b>
MW-1	1.70E-03
MW-2	1.50E-03
MW-3	2.10E-03
MW-13	5.00E-03
MW-14	2.10E-03
MW-16	1.50E-03
	<b>2.32E-03</b>

**Average: 2.05E-03****Min: 1.10E-03****Max: 5.00E-03**

<b>Lower Aquifer Mon Wells</b>	<b>K (cm/sec)</b>
MW-7	2.30E-02
MW-8	2.20E-02
MW-9	2.10E-02
MW-10	2.30E-02
<b>Average:</b>	<b>2.2E-02</b>

**Aquifer Characteristics**

Two Aquifers Separated by Clay Aquiclude

Upper Aquifer

Fine to coarse Sand, little gravel, trace clay

Hydraulic Conductivity

Mean:  $2.0\text{E-}03$  cm/secMax:  $5.0\text{E-}03$  cm/secMin:  $1.1\text{E-}03$  cm/secClay Aquiclude (RI, Tables 2-2 & 4-7)

Lean Clay, trace sand

Hydraulic Conductivity

Mean:  $5.0\text{E-}08$  cm/secMax:  $7.0\text{E-}07$  cm/secMin:  $6.0\text{E-}09$  cm/secLower Aquifer (From Table 2-4)

Fine to medium Sand, some gravel

Hydraulic Conductivity

Mean:  $2.2\text{E-}02$  cm/secMax:  $2.3\text{E-}02$  cm/secMin:  $2.1\text{E-}02$  cm/sec

Upper Aquifer					
	Hydraulic Conductivity		Gradient	Effective Porosity	GW Velocity
	cm/sec	ft/year	ft/ft		
Min:	1.1E-03	1139	0.0025	0.3	9 feet/year
Max:	5.0E-03	5177	0.01	0.2	259 feet/year
Average:	2.0E-03	2118	0.005	0.25	42 feet/year

Lower Aquifer					
	Hydraulic Conductivity		Gradient	Effective Porosity	GW Velocity
	cm/sec	ft/year	ft/ft		
Min:	2.1E-02	21742	0.00035	0.2	38 feet/year
Max:	2.3E-02	23813	0.0006	0.3	48 feet/year
Average:	2.2E-02	22778	0.0005	0.25	46 feet/year

## **APPENDIX B**

### **TIME TREND PLOTS**

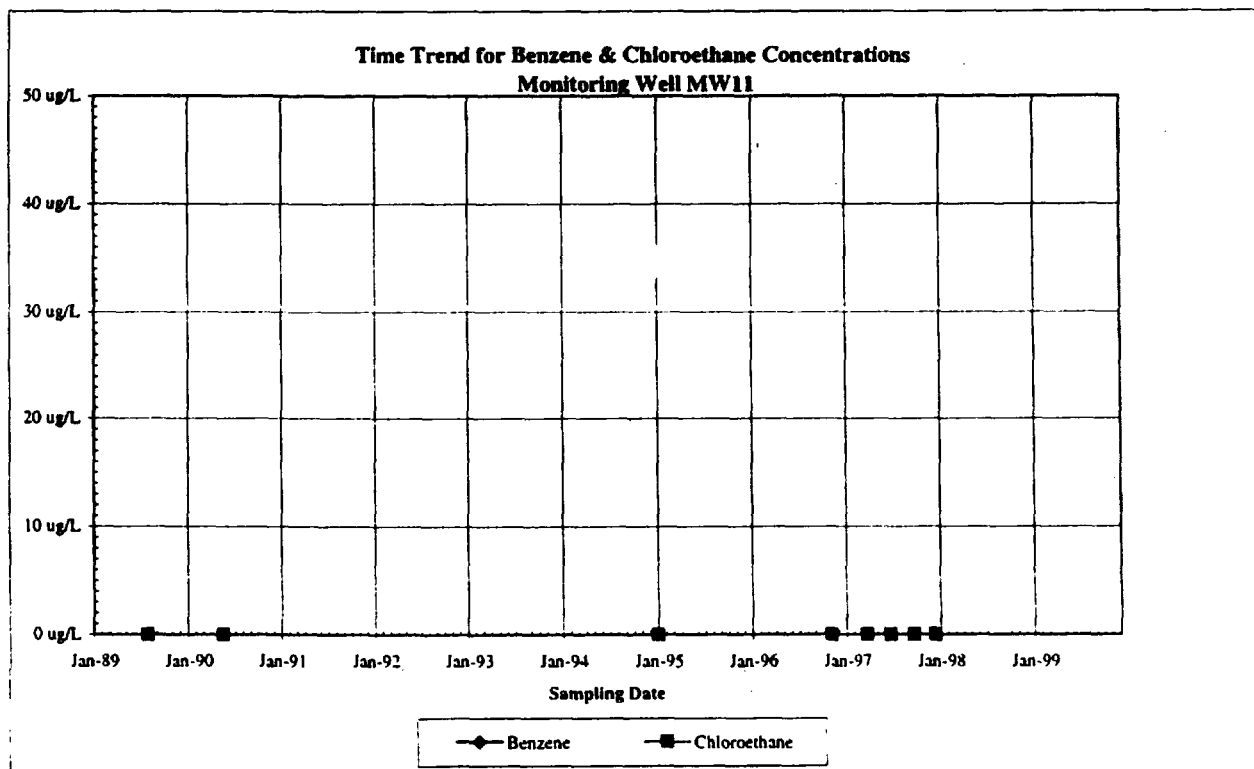
# Upper Aquifer Monitoring Well: MW11

## Baseline Groundwater Monitoring ACS NPL Site

MW11

Date	Benzene	Chloroethane
August-89	BDL	BDL
May-90	BDL	BDL
January-95	BDL	BDL
November-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit





# Upper Aquifer Monitoring Well: MW13

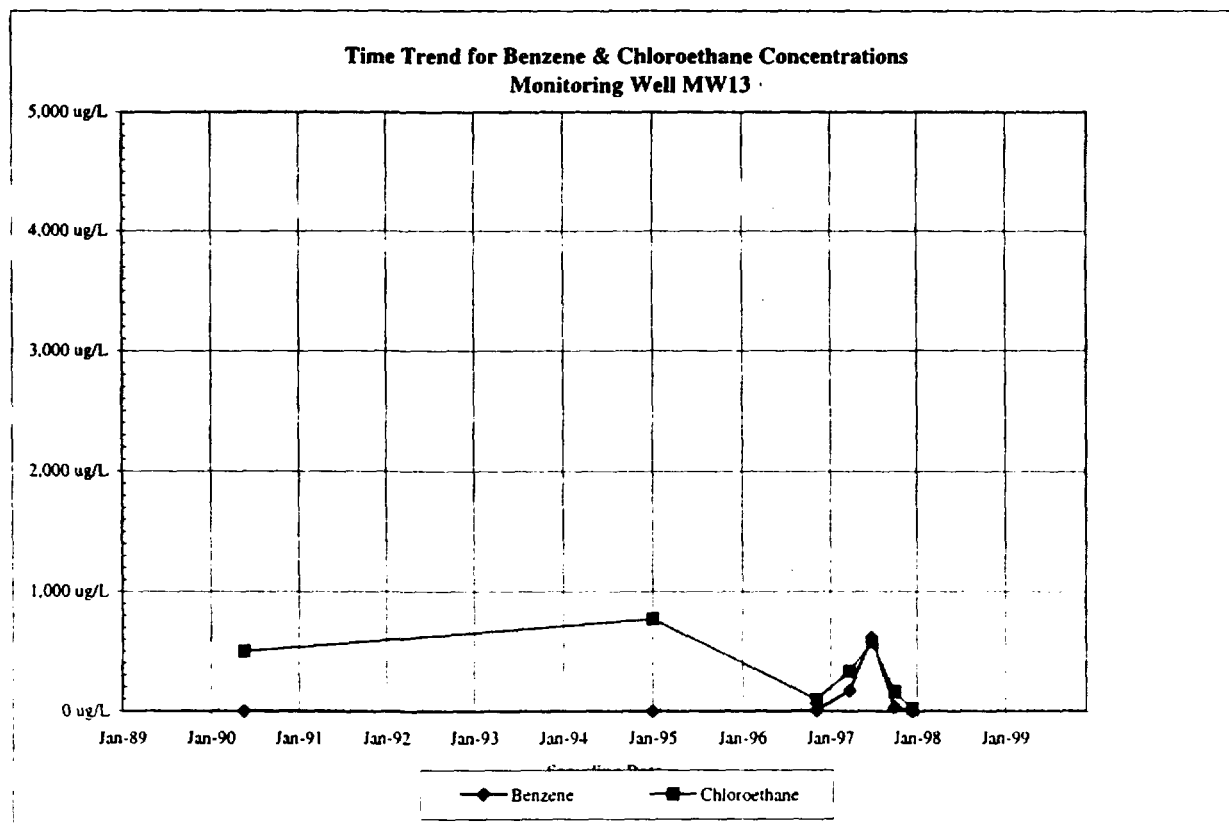
## Baseline Groundwater Monitoring

ACS NPL Site

MW13

Date	Benzene	Chloroethane
August-89		
May-90	2 ug/L	500 ug/L
January-95	BDL	770 ug/L
November-96	6 ug/L	97 ug/L
March-97	170 ug/L	330 ug/L
June-97	610 ug/L	570 ug/L
October-97	33 ug/L	160 ug/L
December-97	BDL	20 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



# Upper Aquifer Monitoring Well: MW14

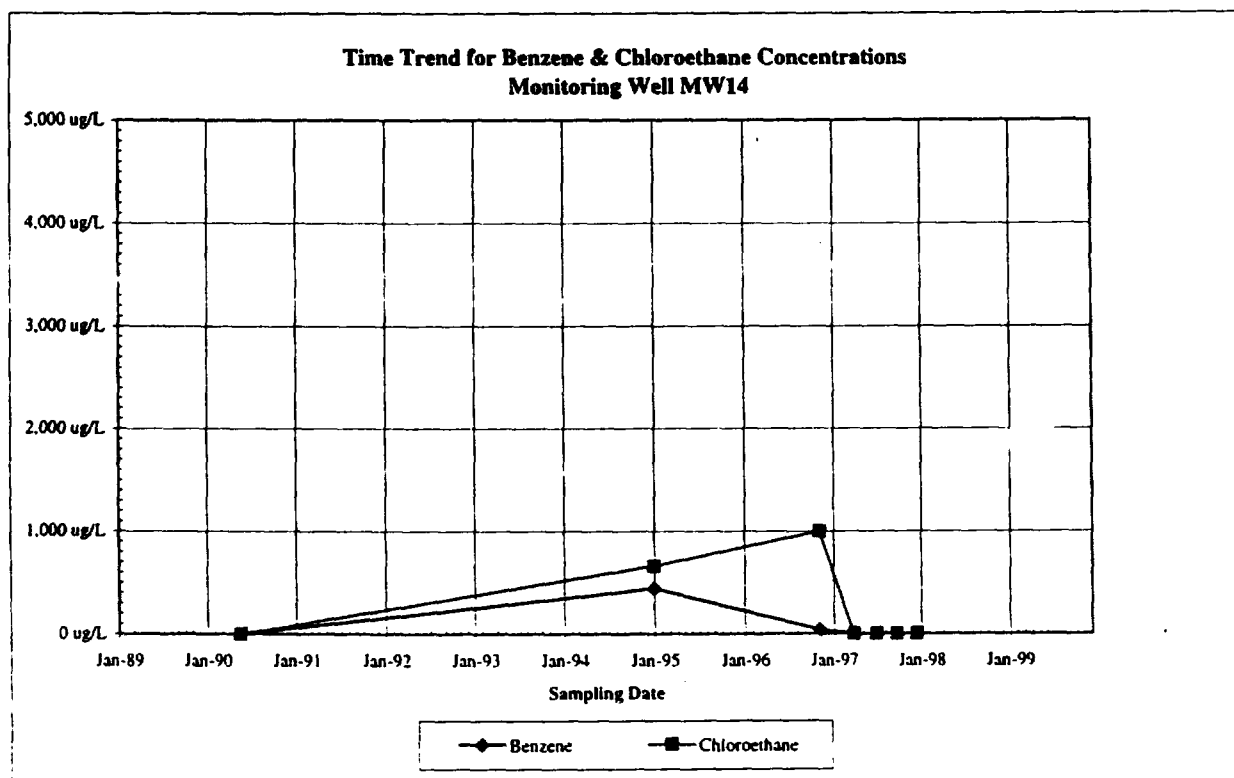
## Baseline Groundwater Monitoring

ACS NPL Site

MW14

Date	Benzene	Chloroethane
August-89		
May-90	2 ug/L	3 ug/L
January-95	440 ug/L	660 ug/L
November-96	41 ug/L	1,000 ug/L
March-97	BDL	BDL
June-97	1 ug/L	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



# Upper Aquifer Monitoring Well: MW37

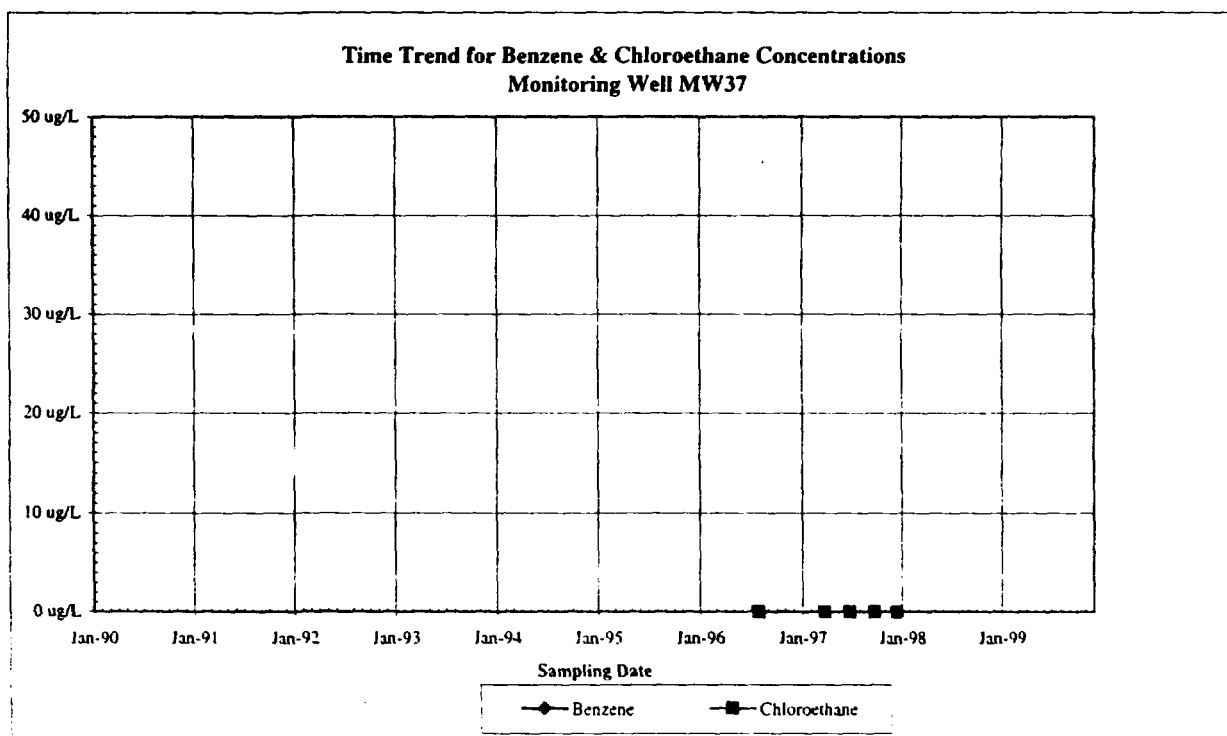
## Baseline Groundwater Monitoring

ACS NPL Site

MW37

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



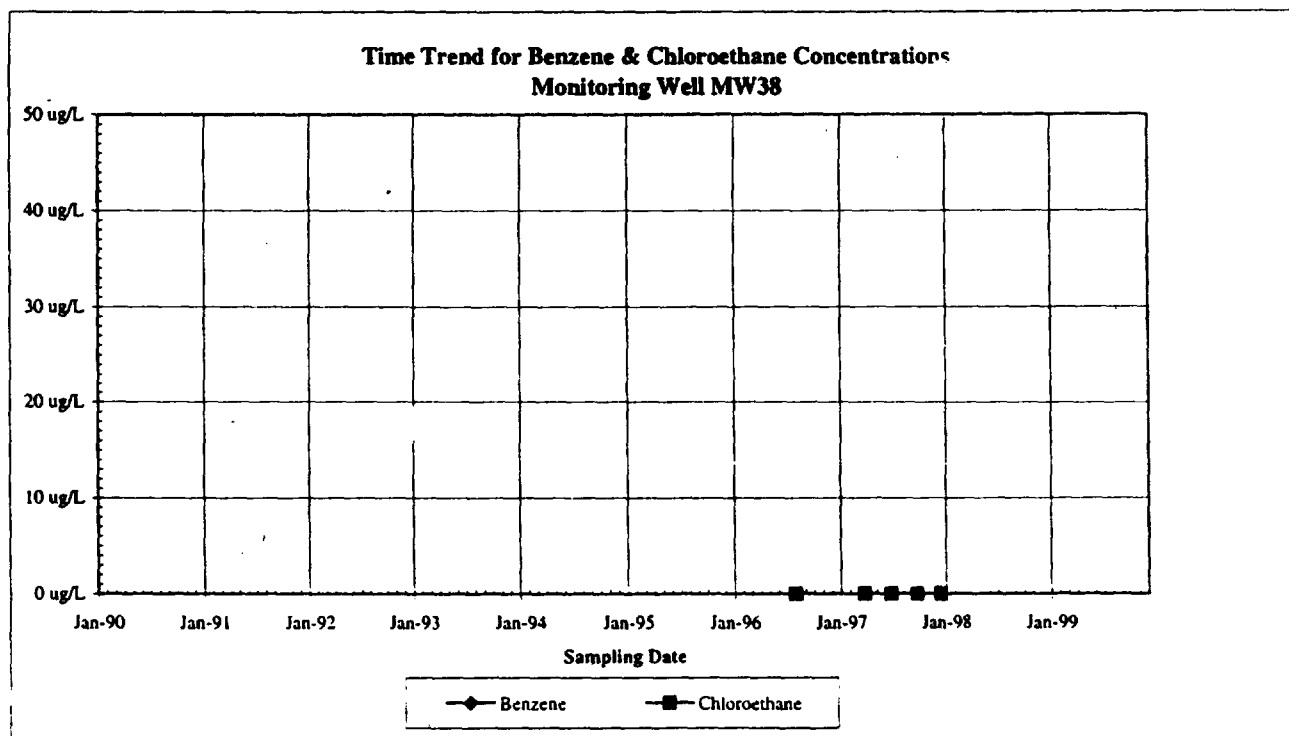
## Upper Aquifer Monitoring Well: MW38

### Baseline Groundwater Monitoring ACS NPL Site

MW38

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



# Upper Aquifer Monitoring Well: MW39

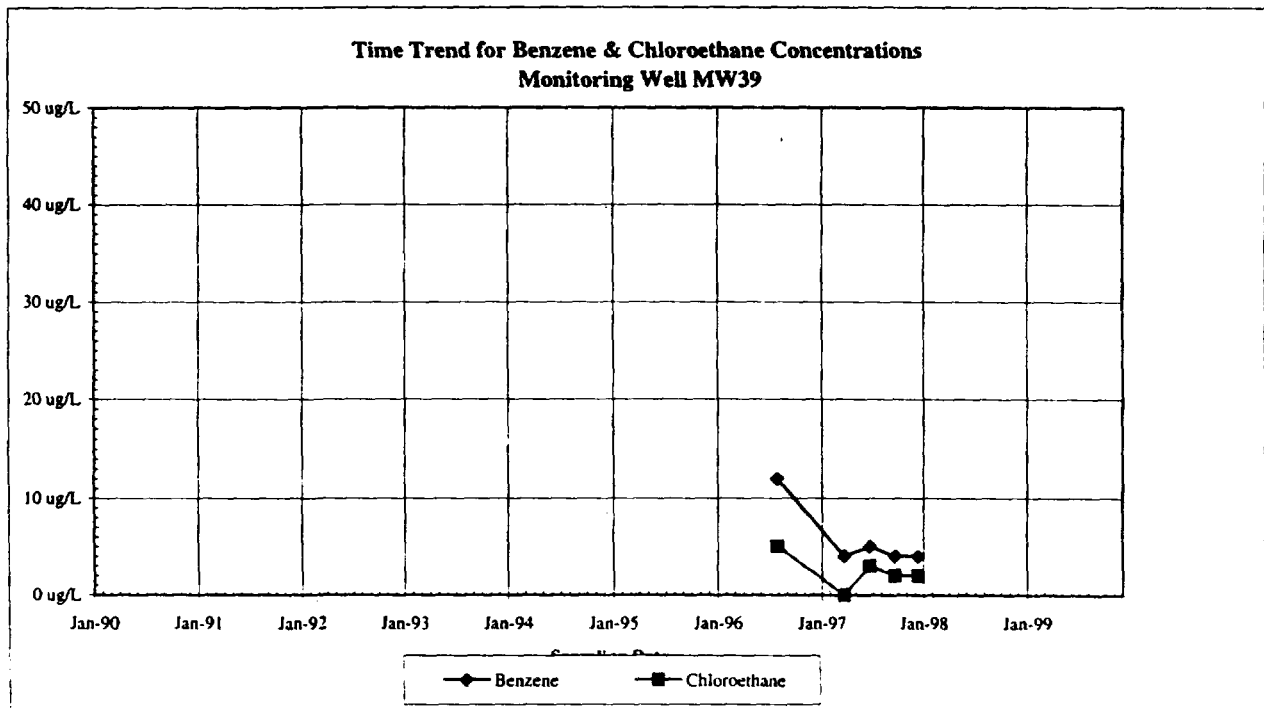
## Baseline Groundwater Monitoring

ACS NPL Site

MW39

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	12 ug/L	5 ug/L
March-97	4 ug/L	BDL
June-97	5 ug/L	3 ug/L
September-97	4 ug/L	2 ug/L
December-97	4 ug/L	2 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



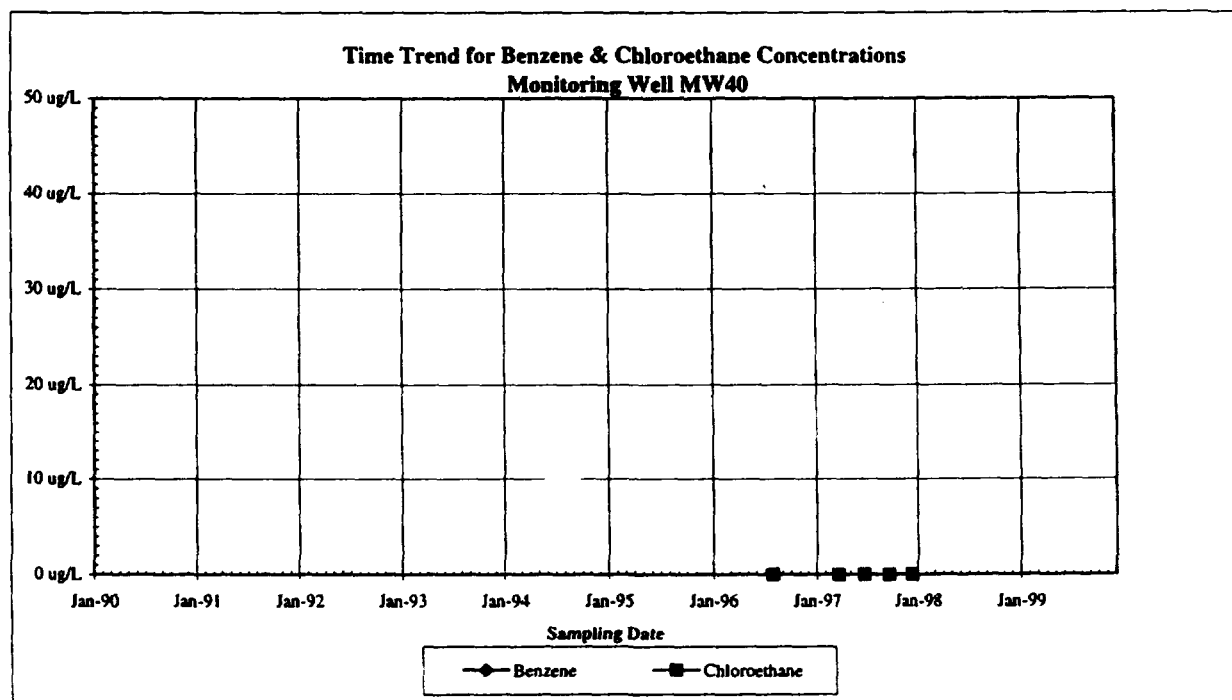
# Upper Aquifer Monitoring Well: MW40

## Baseline Groundwater Monitoring ACS NPL Site

MW40

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



# Upper Aquifer Monitoring Well: MW46

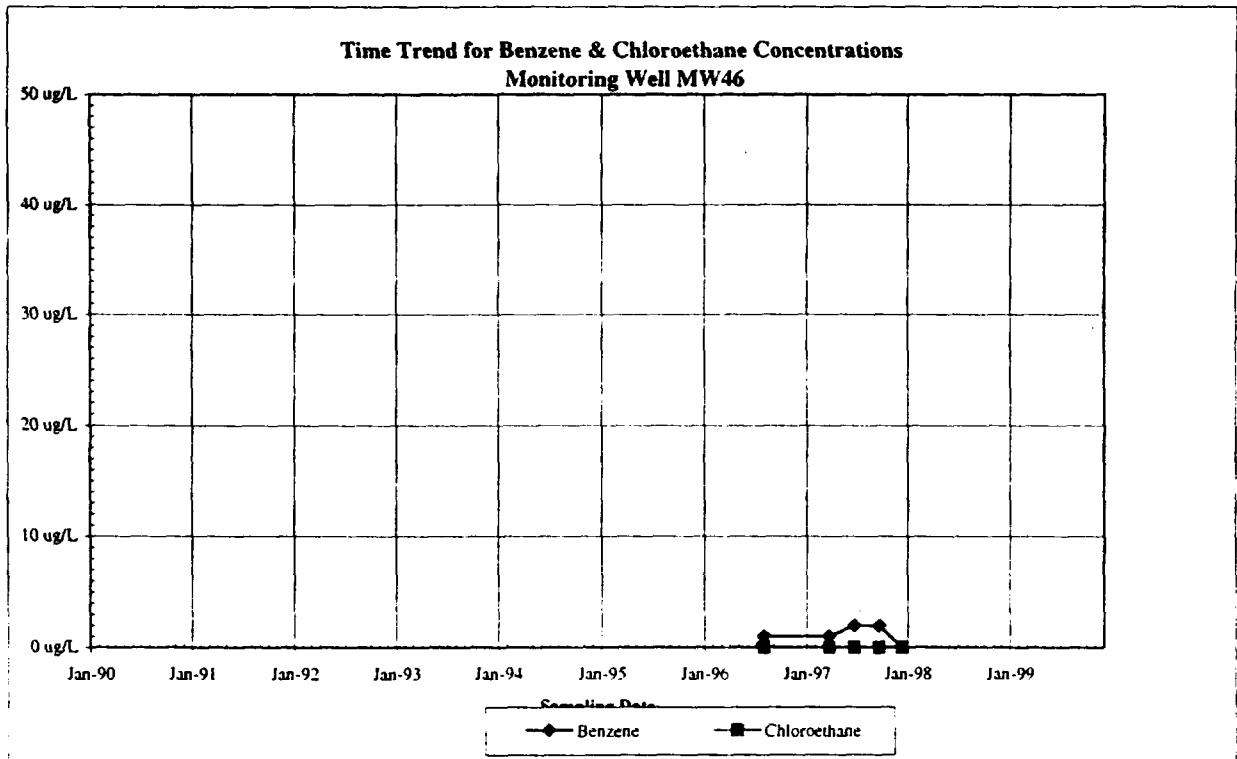
## Baseline Groundwater Monitoring

ACS NPL Site

MW46

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	1 ug/L	BDL
March-97	1 ug/L	BDL
June-97	2 ug/L	BDL
September-97	2 ug/L	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit

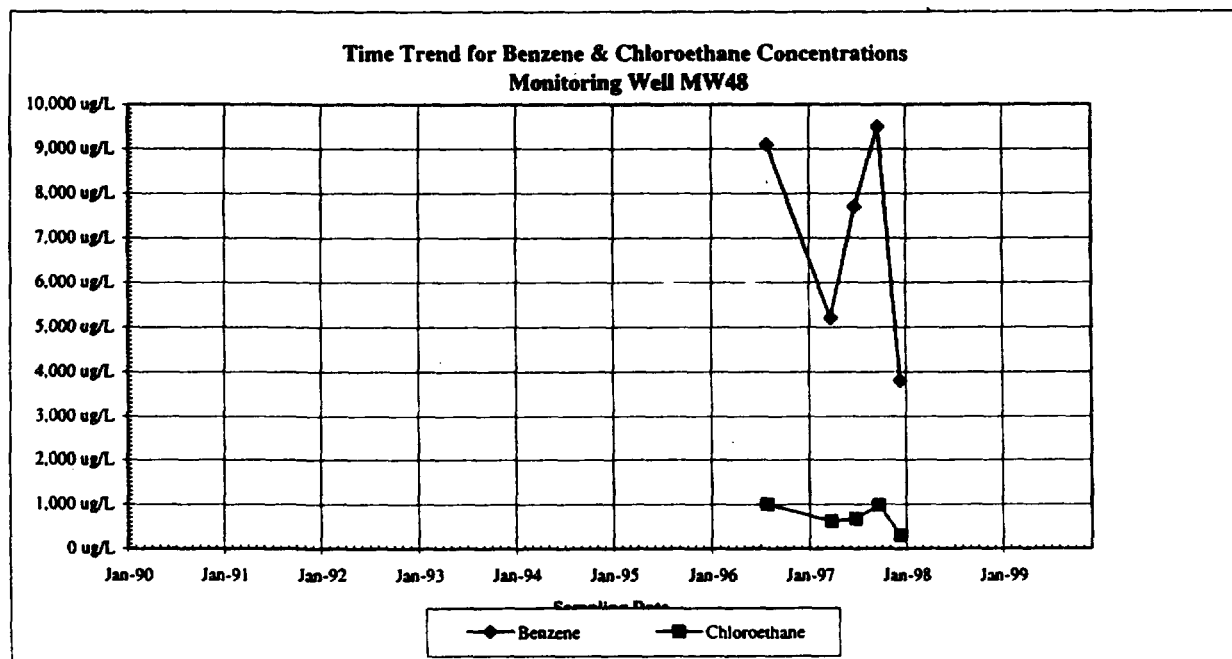


# Upper Aquifer Monitoring Well: MW48

## Baseline Groundwater Monitoring ACS NPL Site

MW48

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	9,100 ug/L	1,000 ug/L
March-97	5,200 ug/L	620 ug/L
June-97	7,700 ug/L	670 ug/L
September-97	9,500 ug/L	980 ug/L
December-97	3,800 ug/L	300 ug/L
June-98		
November-98		
March-99		
October-99		





# Upper Aquifer Monitoring Well: MW49

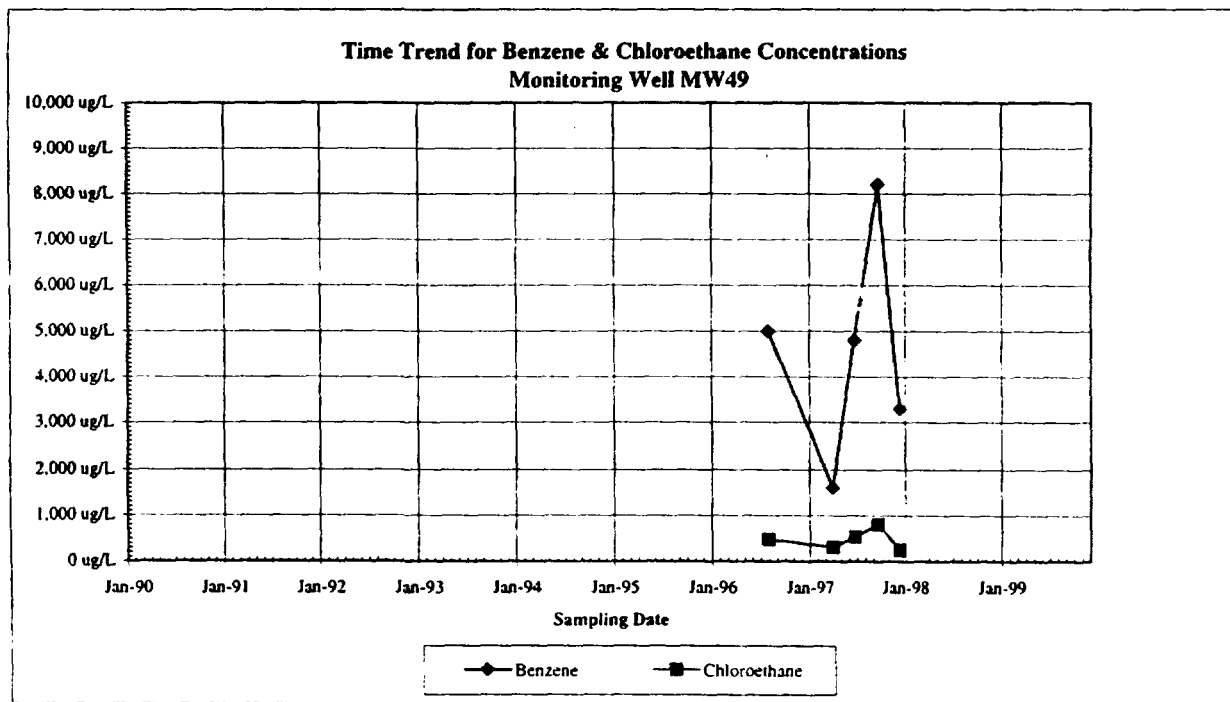
## Baseline Groundwater Monitoring

ACS NPL Site

MW49

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	5,000 ug/L	480 ug/L
April-97	1,600 ug/L	310 ug/L
June-97	4,800 ug/L	540 ug/L
September-97	8,200 ug/L	810 ug/L
December-97	3,300 ug/L	250 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



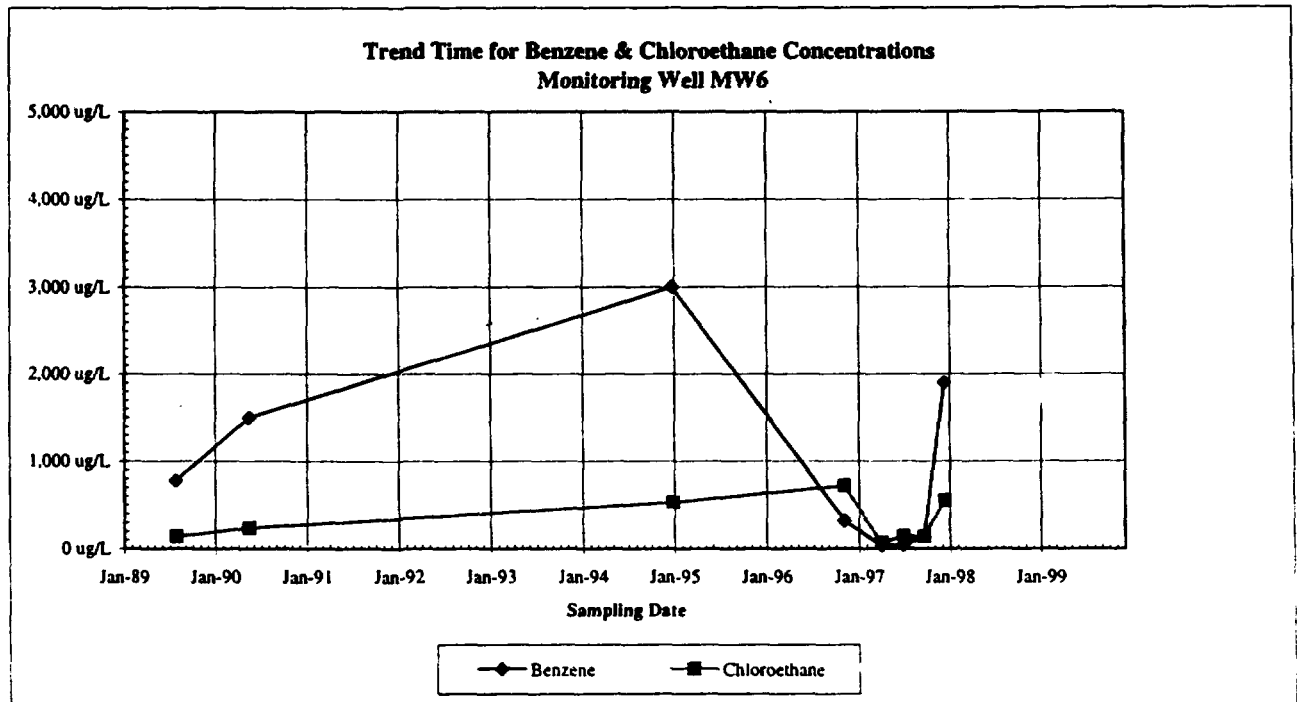
## Upper Aquifer Monitoring Well: MW6

### Baseline Groundwater Monitoring ACS NPL Site

MW6

Date	Benzene	Chloroethane
August-89	780 ug/L	140 ug/L
May-90	1,500 ug/L	240 ug/L
December-94	3,000 ug/L	530 ug/L
November-96	320 ug/L	720 ug/L
April-97	35 ug/L	67 ug/L
July-97	39 ug/L	140 ug/L
September-97	140 ug/L	140 ug/L
December-97	1,900 ug/L	550 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW12

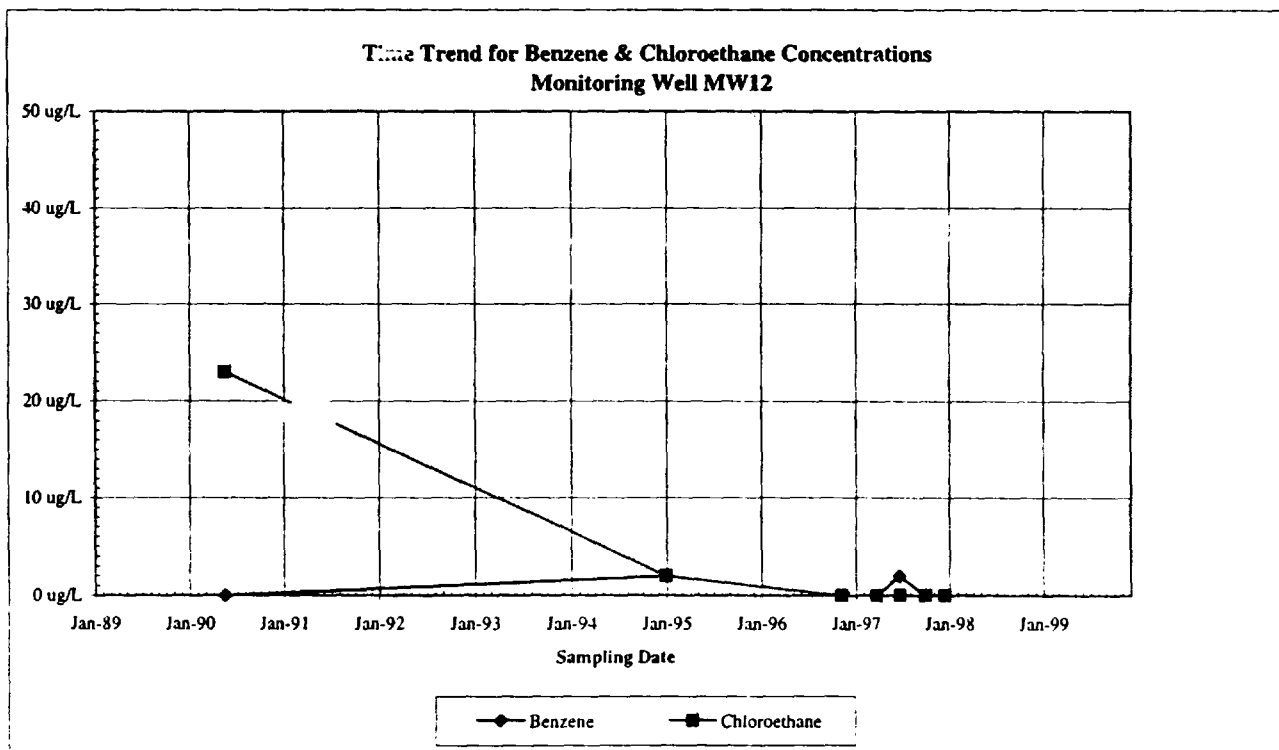
### Baseline Groundwater Monitoring

ACS NPL Site

MW12

Date	Benzene	Chloroethane
August-89		
May-90	BDL	23 ug/L
January-95	2 ug/L	2 ug/L
November-96	BDL	BDL
March-97	BDL	BDL
June-97	2 ug/L	BDL
October-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



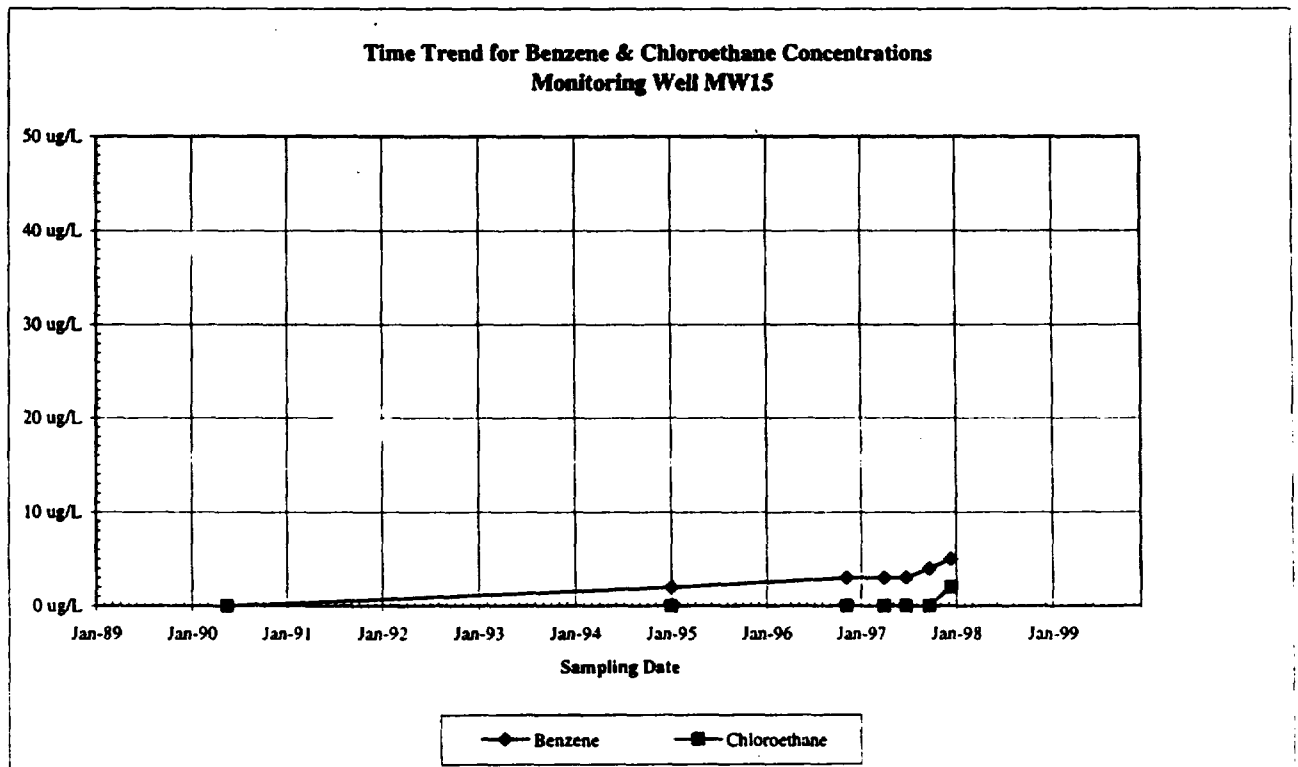
## Upper Aquifer Monitoring Well: MW15

### Baseline Groundwater Monitoring ACS NPL Site

MW15

Date	Benzene	Chloroethane
August-89		
May-90	BDL	BDL
January-95	2 ug/L	BDL
November-96	3 ug/L	BDL
April-97	3 ug/L	BDL
June-97	3 ug/L	BDL
September-97	4 ug/L	BDL
December-97	5 ug/L	2 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW18

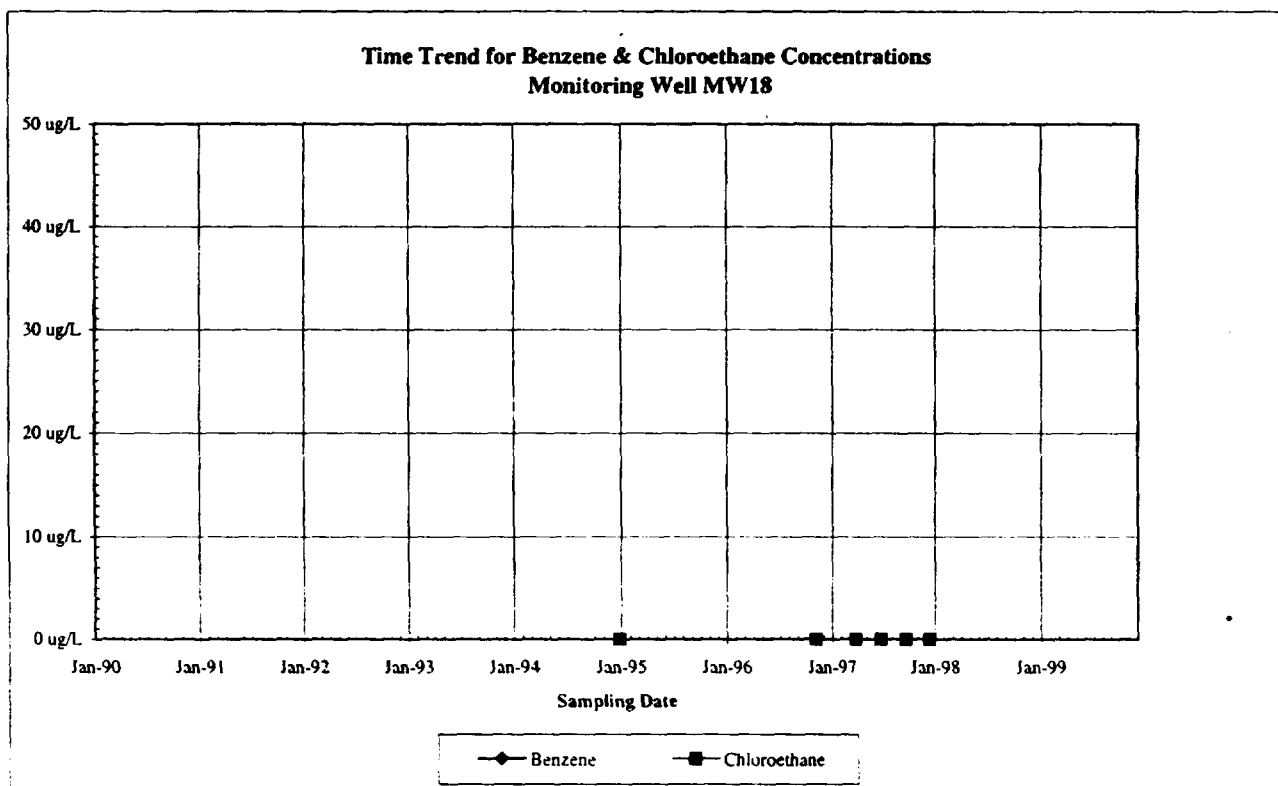
### Baseline Groundwater Monitoring

ACS NPL Site

MW18

Date	Benzene	Chloroethane
August-89		
May-90		
December-94	BDL	BDL
November-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW19

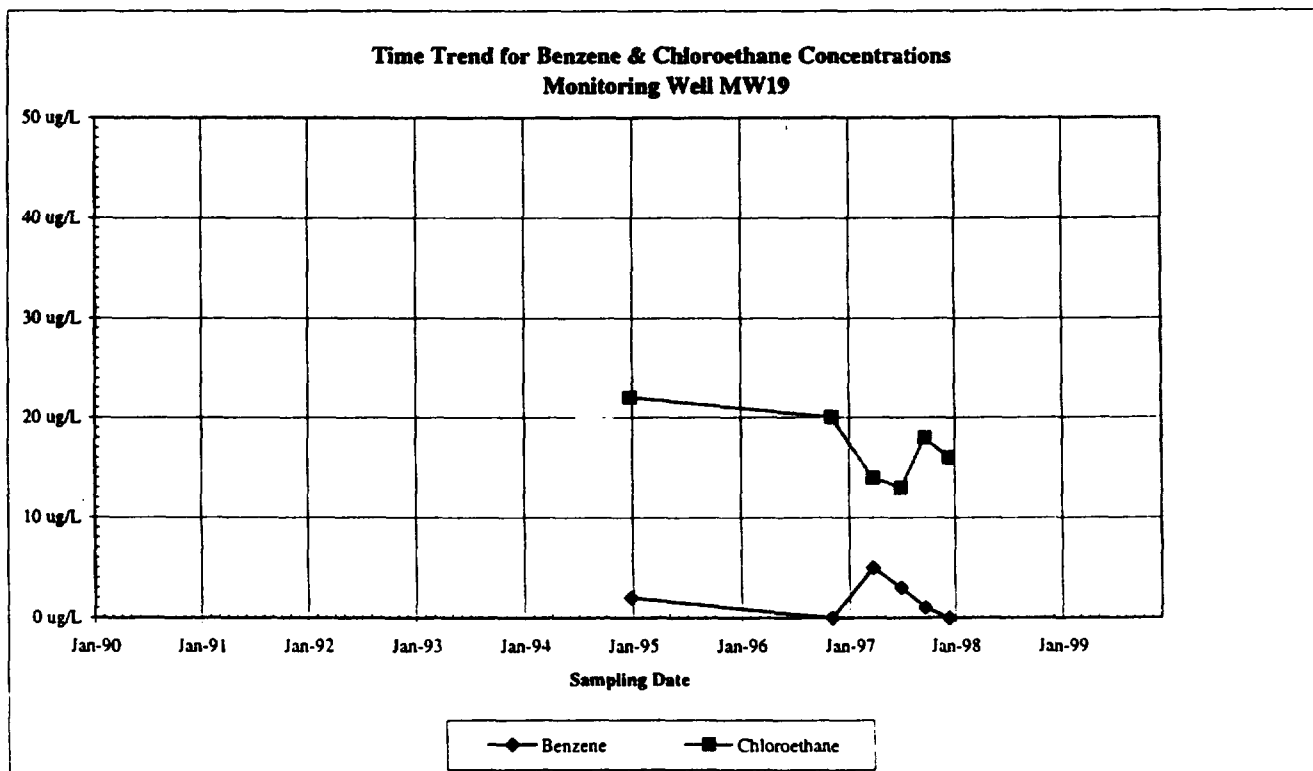
### Baseline Groundwater Monitoring

ACS NPL Site

MW19

Date	Benzene	Chloroethane
August-89		
May-90		
December-94	2 ug/L	22 ug/L
November-96	BDL	20 ug/L
March-97	5 ug/L	14 ug/L
June-97	3 ug/L	13 ug/L
September-97	1 ug/L	18 ug/L
December-97	BDL	16 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW41

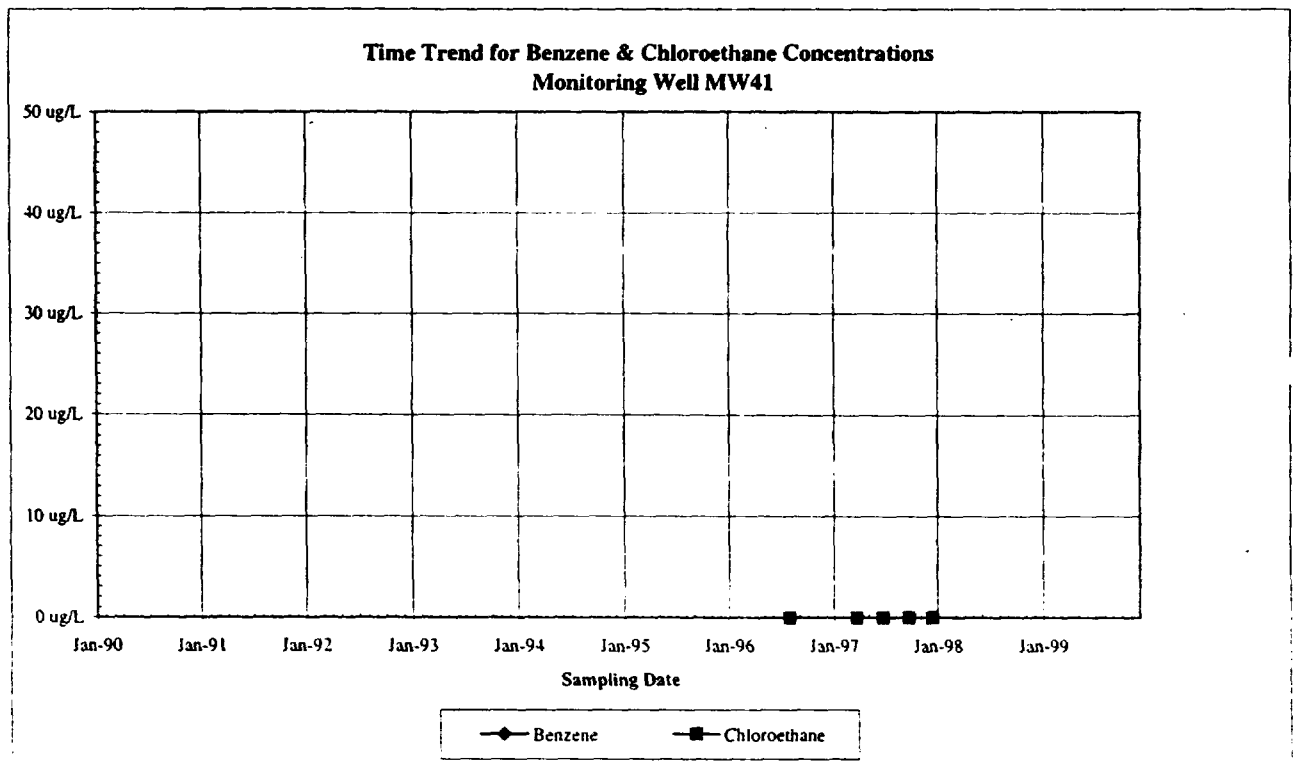
### Baseline Groundwater Monitoring

ACS NPL Site

MW41

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW42

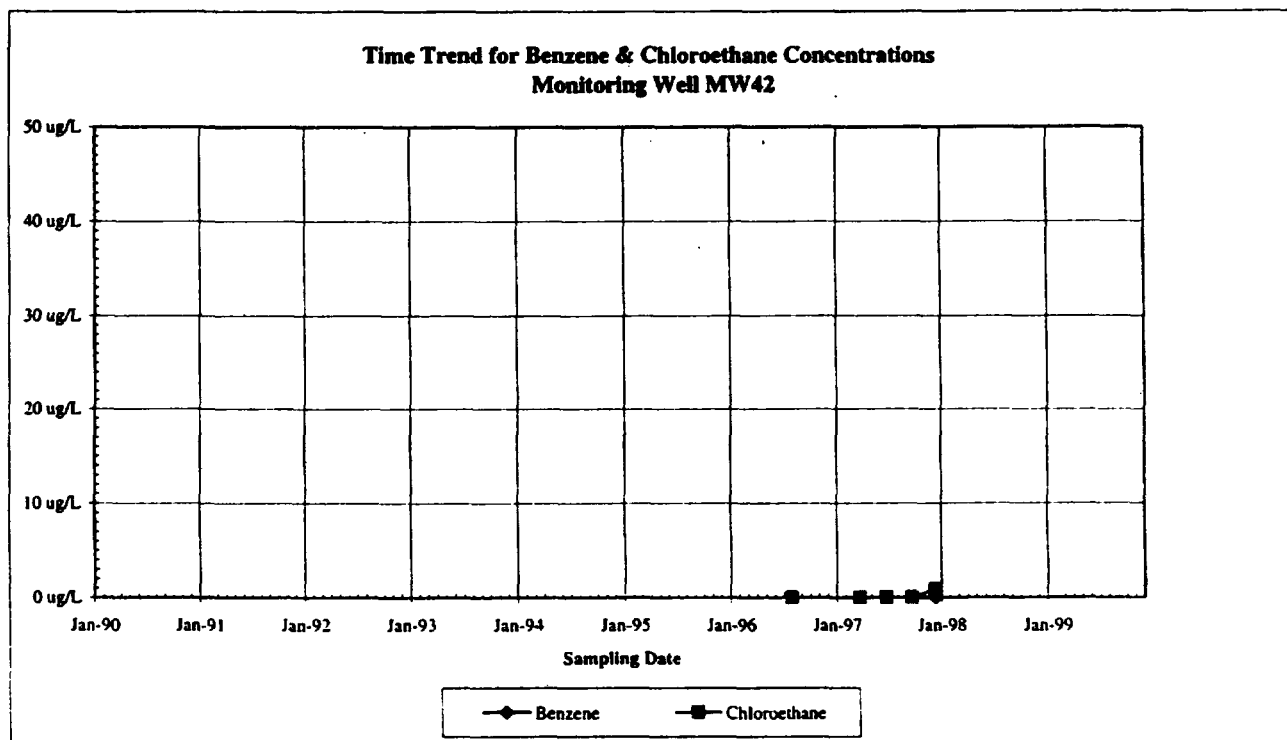
### Baseline Groundwater Monitoring

ACS NPL Site

MW42

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	0.9 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit





## Upper Aquifer Monitoring Well: MW43

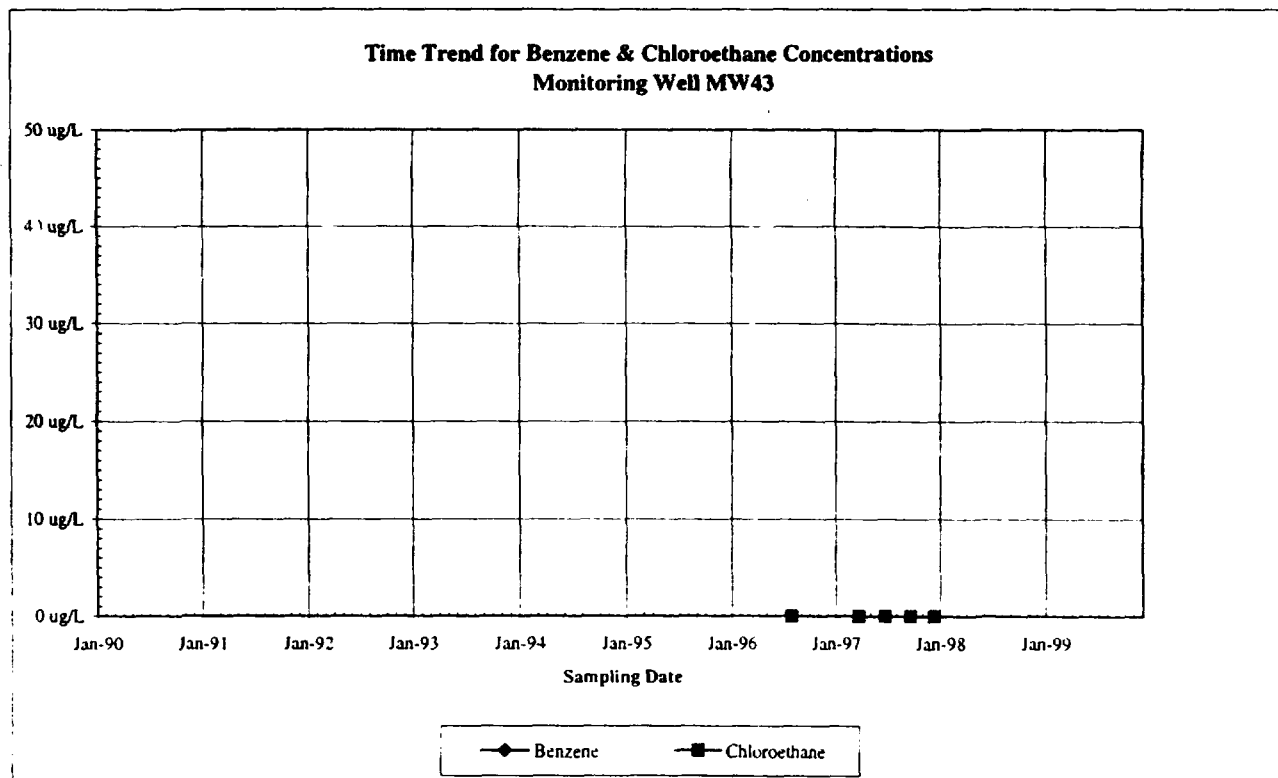
### Baseline Groundwater Monitoring

ACS NPL Site

MW43

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW44

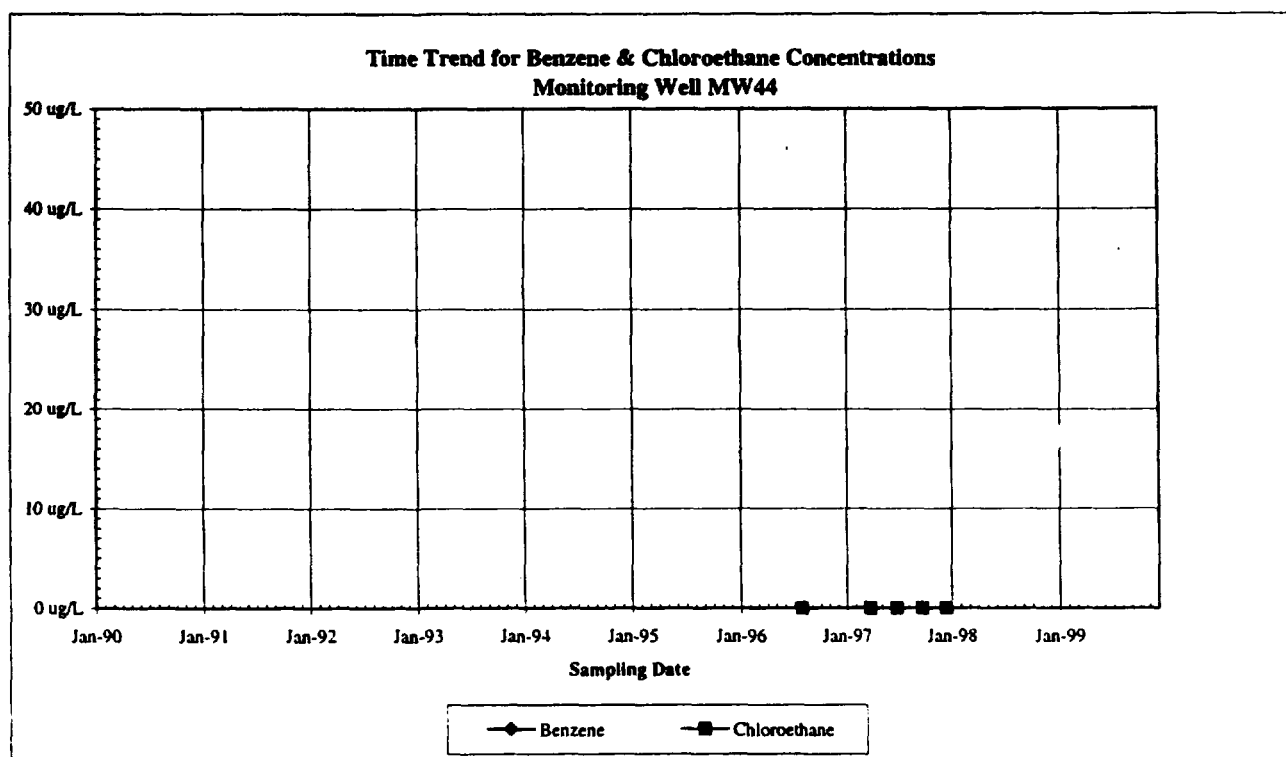
### Baseline Groundwater Monitoring

ACS NPL Site

MW44

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
September-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Upper Aquifer Monitoring Well: MW45

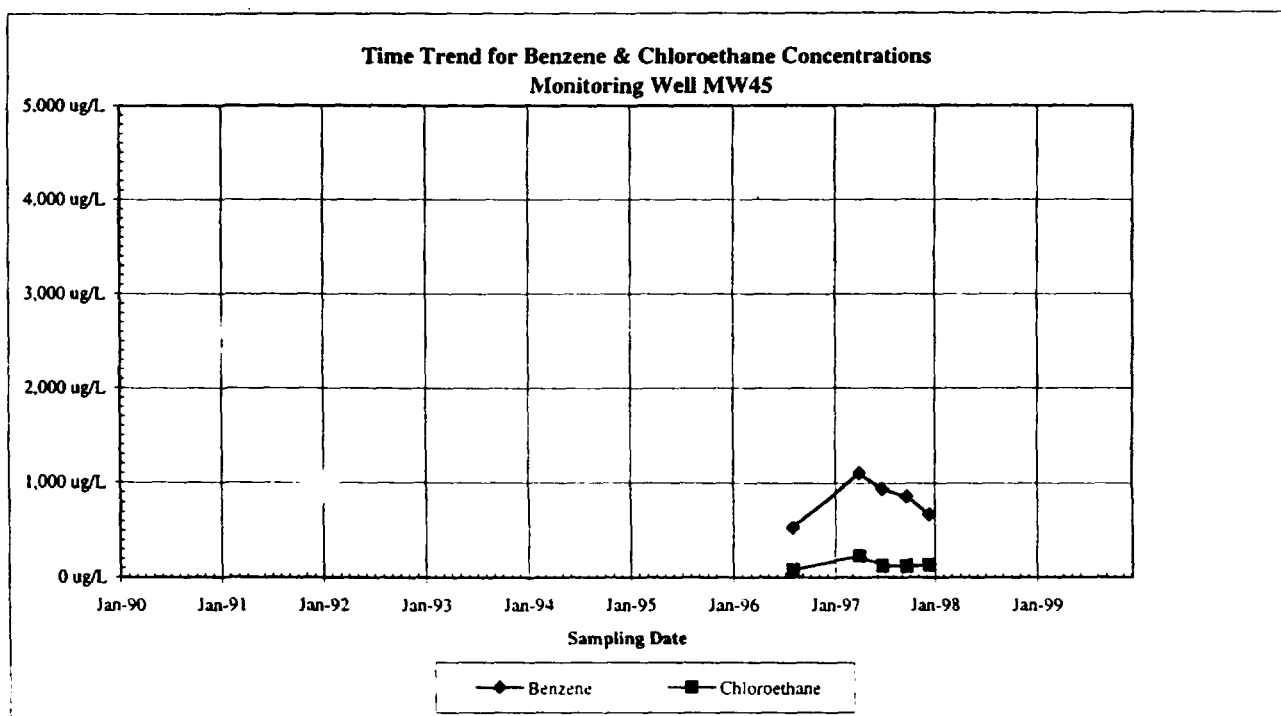
### Baseline Groundwater Monitoring

ACS NPL Site

MW45

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	530 ug/L	82 ug/L
April-97	1,100 ug/L	230 ug/L
June-97	940 ug/L	120 ug/L
September-97	860 ug/L	120 ug/L
December-97	670 ug/L	130 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



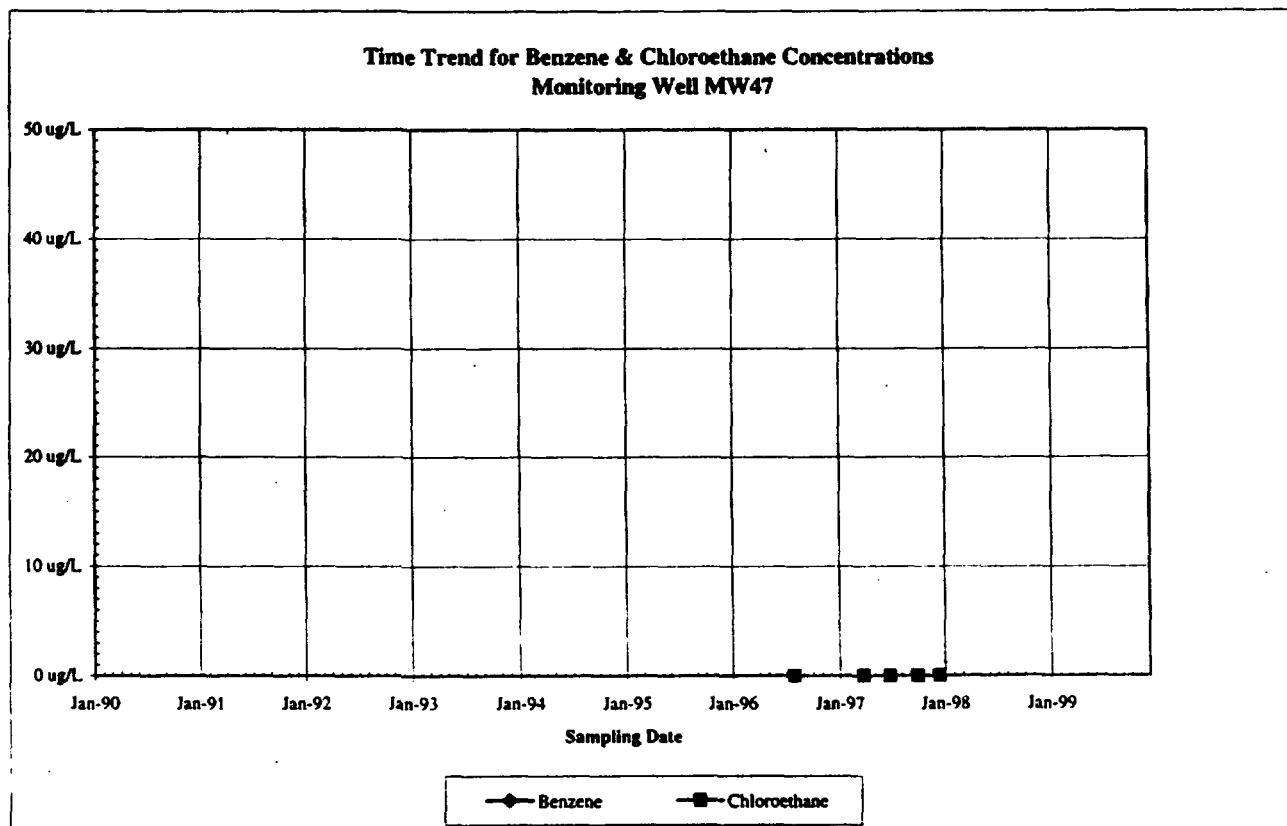
## Upper Aquifer Monitoring Well: MW47

**Baseline Groundwater Monitoring**  
ACS NPL Site

MW47

Date	Benzene	Chloroethane
August-89		
May-90		
December-94		
August-96	BDL	BDL
March-97	BDL	BDL
June-97	BDL	BDL
October-97	BDL	BDL
December-97	BDL	BDL
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Lower Aquifer Monitoring Well: MW9

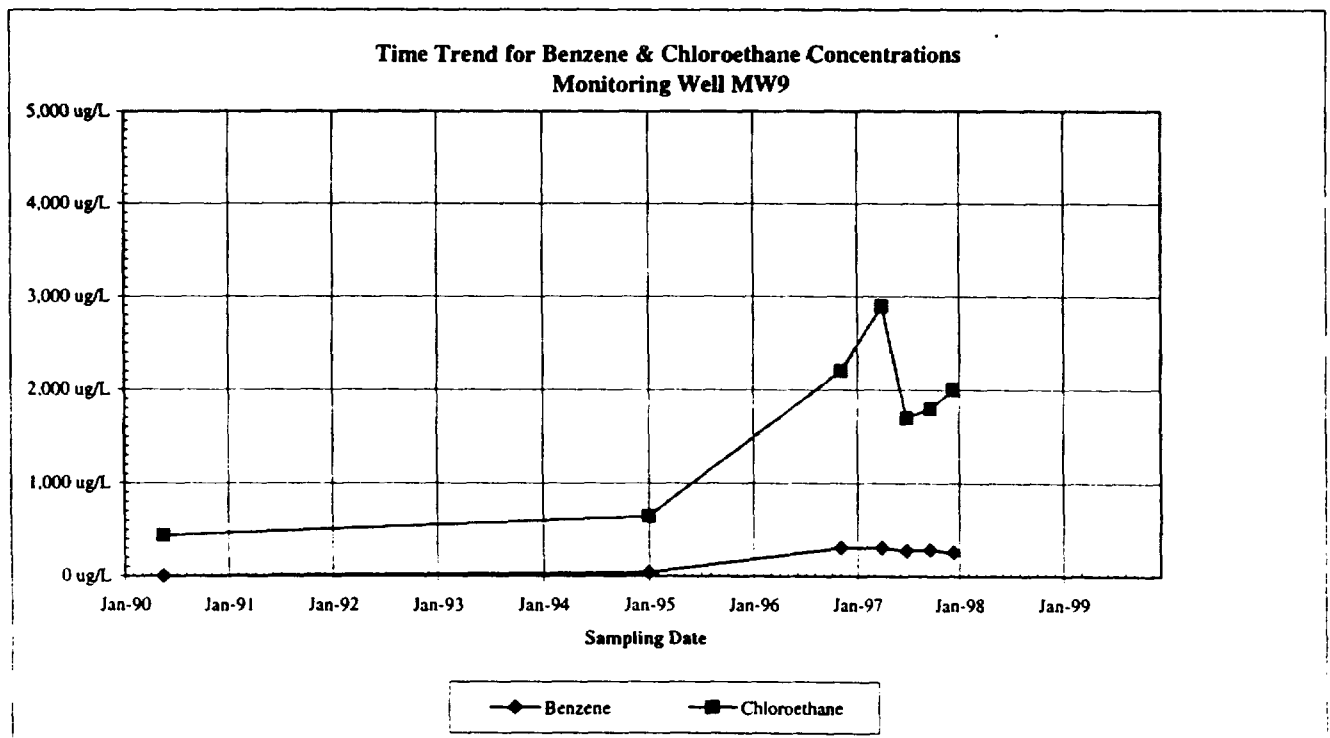
### Baseline Groundwater Monitoring

ACS NPL Site

MW9

Date	Benzene	Chloroethane
August-89		
May-90	BDL	440 ug/L
January-95	40 ug/L	650 ug/L
November-96	310 ug/L	2,200 ug/L
April-97	310 ug/L	2,900 ug/L
June-97	280 ug/L	1,700 ug/L
September-97	290 ug/L	1,800 ug/L
December-97	260 ug/L	2,000 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



## Lower Aquifer Monitoring Well: MW10C

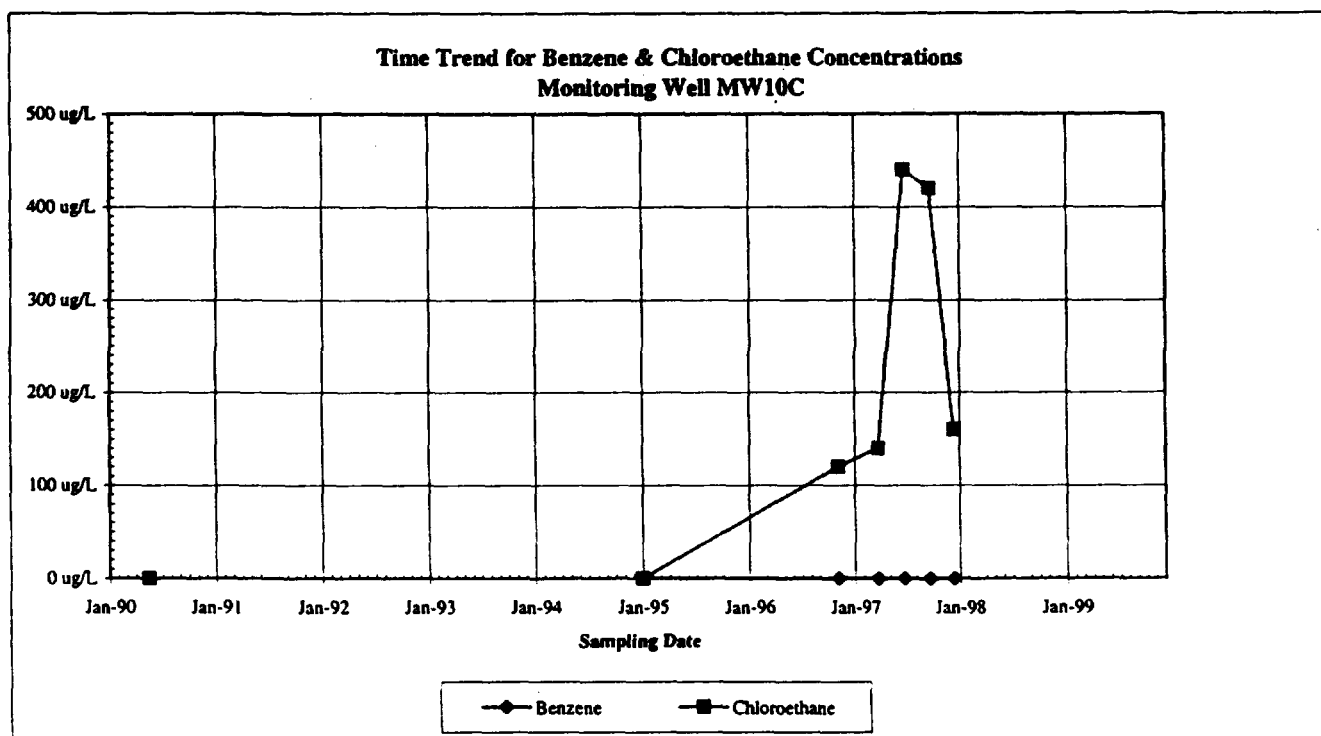
### Baseline Groundwater Monitoring

ACS NPL Site

MW10C

Date	Benzene	Chloroethane
August-89		
May-90	BDL	BDL
January-95	BDL	BDL
November-96	BDL	120 ug/L
March-97	BDL	140 ug/L
June-97	BDL	440 ug/L
September-97	BDL	420 ug/L
December-97	BDL	160 ug/L
June-98		
November-98		
March-99		
October-99		

BDL = Below the Detection Limit



**Appendix C**  
**Maximum Concentrations**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Event 1 = Sampled in either March 1996, August 1996, or November 1996

Event 2 = Sampled in either March 1997 or April 1997

Event 3 = Sampled in either June 1997 or July 1997

Event 4 = Sampled in either September 1997 or October 1997

LQ = Lab Qualifier

DQ = Data Validation Qualifier

B = The analyte was found in the blank.

E = Exceeds Calibration

J = The concentration is estimated.

R = Unusable

S = Method of standard additions

U = The concentration is below the detection limit.

\* = Values outside of QC limits

NA = Not analyzed / Not available

A blank in the result column indicates that the concentration was below the detection limit.

AHS

J:\1252\042\Sept 97 Sampling Rpt\HighDetects\Key

1252042.221601

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit		
M-15	1,1,1-Trichloroethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,1,2,2-Tetrachloroethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,1,2-Trichloroethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,1-Dichloroethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,1-Dichloroethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,2-Dichloroethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,2-Dichloroethane (total)	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	1,2-Dichloropropane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	2-Butanone	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	2-Hexanone	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	4-Methyl-2-pentanone	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Acetone	ug/L	NA				U	U		10		U	U		10	18			10	18
M-15	Benzene	ug/L	NA				U	U		10		U	U		10	2.0	J		10	10
M-15	Bromochloromethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Bromoforn	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Bromomethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Carbon Disulfide	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Carbon Tetrachloride	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Chlorobenzene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Chloroethane	ug/L	NA				U	U		10		U	U		10	2.0	J		10	10
M-15	Chloroform	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Chloromethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	cis-1,3-Dichloropropene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Dibromochloromethane	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Ethyl Benzene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Methylene Chloride	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Styrene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Tetrachloroethene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Toluene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	trans-1,3-Dichloropropene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Trichloroethene	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Vinyl Chloride	ug/L	NA				U	U		10		U	U		10		U	U		10
M-15	Xylenes (total)	ug/L	NA				U	U		10		U	U		10		U	U		10
M-35	1,1,1-Trichloroethane	ug/L	NA					U		10		U	U		10			U		10
M-35	1,1,2,2-Tetrachloroethane	ug/L	NA					U		10		U	U		10			U		10
M-35	1,1,2-Trichloroethane	ug/L	NA					U		10		U	U		10			U		10
M-35	1,1-Dichloroethane	ug/L	NA					U		10		U	U		10			U		10
M-35	1,1-Dichloroethane	ug/L	NA					U		10		U	U		10			U		10
M-35	1,2-Dichloroethane	ug/L	NA					U		10		U	U		10			U		10
M-35	1,2-Dichloroethane (total)	ug/L	NA					U		10		U	U		10			U		10
M-35	1,2-Dichloropropane	ug/L	NA					U		10		U	U		10			U		10
M-35	2-Butanone	ug/L	NA					U		10		U	U		10			U		10
M-35	2-Hexanone	ug/L	NA					U		10		U	U		10			U		10
M-35	4-Methyl-2-pentanone	ug/L	NA					U		10		U	U		10			U		10
M-35	Acetone	ug/L	NA				8.5		J	NA		U	U		10			U		10
M-35	Benzene	ug/L	NA					U		10		U	U		10			U		10
M-35	Bromochloromethane	ug/L	NA					U		10		U	U		10			U		10
M-35	Bromoforn	ug/L	NA					U		10		U	U		10			U		10
M-35	Bromomethane	ug/L	NA					U		10		U	U		10			U		10
M-35	Carbon Disulfide	ug/L	NA					U		10		U	U		10			U		10
M-35	Carbon Tetrachloride	ug/L	NA					U		10		U	U		10			U		10
M-35	Chlorobenzene	ug/L	NA					U		10		U	U		10			U		10
M-35	Chloroethane	ug/L	NA				3.0	J		10		U	U		10			U		10



**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-3S	Chloroform	ug/L	NA						U	10			U	10			U	10	10
M-3S	Chloromethane	ug/L	NA						U	10			U	10			U	10	10
M-3S	cis-1,3-Dichloropropene	ug/L	NA						U	10			U	10			U	10	10
M-3S	Dibromochloromethane	ug/L	NA						U	10			U	10			U	10	10
M-3S	Ethyl Benzene	ug/L	NA						U	10			U	10			U	10	10
M-3S	Methylene Chloride	ug/L	NA						U	10			U	10			U	10	10
M-3S	Styrene	ug/L	NA						U	10			U	10			U	10	10
M-3S	Tetrachloroethene	ug/L	NA						U	10			U	10			U	10	10
M-3S	Toluene	ug/L	NA						U	10			U	10			U	10	10
M-3S	trans-1,3-Dichloropropene	ug/L	NA						U	10			U	10			U	10	10
M-3S	Trichloroethene	ug/L	NA						U	10			U	10			U	10	10
M-3S	Vinyl Chloride	ug/L	NA						U	10			U	10			U	10	10
M-3S	Xylenes (total)	ug/L	NA						U	10			U	10			U	10	10
M-4D	1,1,1-Trichloroethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	1,1,2,2-Tetrachloroethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	1,1,2-Trichloroethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	1,1-Dichloroethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	1,2-Dichloroethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	1,2-Dichloroethane (total)	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	1,2-Dichloropropane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	2-Butanone	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	2-Hexanone	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	4-Methyl-2-pentanone	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Acetone	ug/L	NA				6.0	U	U	10			U	10		U	U	10	10
M-4D	Benzene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Bromodichloromethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Bromotoluene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Bromomethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Carbon Disulfide	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Carbon Tetrachloride	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Chlorobenzene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Chloromethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Chloroform	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Chloromethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	cis-1,3-Dichloropropene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Dibromochloromethane	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Ethyl Benzene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Methylene Chloride	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Styrene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Tetrachloroethene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Toluene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	trans-1,3-Dichloropropene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Trichloroethene	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Vinyl Chloride	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4D	Xylenes (total)	ug/L	NA					U	U	10			U	10		U	U	10	10
M-4S	1,1,1-Trichloroethane	ug/L	NA					U	U	100			U	100		U	U	80	100
M-4S	1,1,2,2-Tetrachloroethane	ug/L	NA					U	U	100			U	100		U	U	80	100
M-4S	1,1,2-Trichloroethane	ug/L	NA					U	U	100			U	100		U	U	80	100
M-4S	1,1-Dichloroethane	ug/L	NA					U	U	100			U	100		U	U	80	100
M-4S	1,1-Dichloroethene	ug/L	NA					U	U	100			U	100		U	U	80	100
M-4S	1,2-Dichloroethane	ug/L	NA					U	U	100			U	100		U	U	80	100
M-4S	1,2-Dichloroethene (total)	ug/L	NA					U	U	100	15		U	100		U	U	80	100

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-4S	1,2-Dichloropropane	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	2-Butanone	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	2-Hexanone	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	4-Methyl-2-pentanone	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Acetone	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Benzene	ug/L	NA				98	J		100	190			100	73	J		80	190
M-4S	Bromodichloromethane	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Bromofluoromethane	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Bromomethane	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Carbon Disulfide	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Carbon Tetrachloride	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Chlorobenzene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Chloroethane	ug/L	NA				1,300			100	1,300	J		100	1,000			80	1,300
M-4S	Chloroform	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Chloromethane	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	cis-1,3-Dichloropropene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Dibromochloromethane	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Ethyl Benzene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Methylene Chloride	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Styrene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Tetrachloroethene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Toluene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	trans-1,3-Dichloropropene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Trichloroethene	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Vinyl Chloride	ug/L	NA					U	U	100		U	U	100		U	U	80	100
M-4S	Xylenes (total)	ug/L	NA					U	U	100		U	U	100		U	U	80	100
MW-06	1,1,1-Trichloroethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	1,1,2,2-Tetrachloroethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	1,1,2-Trichloroethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	1,1-Dichloroethane	ug/L	21	J		NA	3.0	J		10		U	U	10		U	U	10	21
MW-06	1,1-Dichloroethene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	1,2-Dichloroethane	ug/L		U	U	50		U	U	10		U	U	10	3.0	J		10	50
MW-06	1,2-Dichloroethene (total)	ug/L	26	J		NA	4.0	J		10	5.0	J		10	2.0	J		10	26
MW-06	1,2-Dichloropropane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	2-Butanone	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	2-Hexanone	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	4-Methyl-2-pentanone	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Acetone	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Benzene	ug/L	320			NA	35			10	39			10	140			10	320
MW-06	Bromodichloromethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Bromofluoromethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Bromomethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Carbon Disulfide	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Carbon Tetrachloride	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Chlorobenzene	ug/L		U	U	50		U	U	10		U	U	10	1.0	J		10	50
MW-06	Chloroethane	ug/L	720			NA	67			10	140	J		10		J		10	720
MW-06	Chloroform	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Chloromethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	cis-1,3-Dichloropropene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Dibromochloromethane	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Ethyl Benzene	ug/L	16	J		NA		U	U	10		U	U	10	13			10	16
MW-06	Methylene Chloride	ug/L	17	J		NA		U	U	10	2.0	J		10		U	U	10	17
MW-06	Styrene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-06	Tetrachloroethene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Toluene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	trans-1,3-Dichloropropene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Trichloroethene	ug/L		U	U	50		U	U	10		U	U	10		U	U	10	50
MW-06	Vinyl Chloride	ug/L		U	U	50		U	U	10	3.0	J		10	4.0	J		10	50
MW-06	Xylenes (total)	ug/L	40	J		NA		U	U	10		U	U	10	29			10	40
MW-07	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-07	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	UJ	10		U	U	10	10
MW-07	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-07	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Acetone	ug/L		U	U	10	20			10			UJ	24		U	U	10	24
MW-07	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Bromotoluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-07	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-07	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Chloroethane	ug/L		U	U	10		U	U	10			UJ	10		U	U	10	10
MW-07	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Dibromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-07	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Toluene	ug/L		U	U	10		U	U	10		U	U	10	1.0	J		10	10
MW-07	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-07	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-08	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	UJ	10		U	U	10	10
MW-08	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	UJ	10	10
MW-08	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	Acetone	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-08	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-01	Bromoforn	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-01	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-09	1,1,1-Trichloroethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,1,2,2-Tetrachloroethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,1,2-Trichloroethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,1-Dichloroethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,1-Dichloroethene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,2-Dichloroethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,2-Dichloroethene (total)	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	1,2-Dichloropropane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	2-Butanone	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	2-Hexanone	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	4-Methyl 2-pentanone	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Acetone	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Benzene	ug/L	310			NA	310			200	305			NA	290			160	310
MW-09	Bromodichloromethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Bromoforn	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Bromomethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Carbon Disulfide	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Carbon Tetrachloride	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Chlorobenzene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Chloroethane	ug/L	2,200			NA	2,900			200	1,850			NA	1,800			160	2,900
MW-09	Chloroform	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Chloromethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	cis-1,3-Dichloropropene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Dibromochloromethane	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Ethyl Benzene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Methylene Chloride	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Styrene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Tetrachloroethene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Toluene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	trans-1,3-Dichloropropene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Trichloroethene	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Vinyl Chloride	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-09	Xylenes (total)	ug/L		U	U	200		U	U	200		U	U	130		U	U	160	200
MW-10C	1,1,1-Trichloroethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	
MW-10C	1,1,2,2-Tetrachloroethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	1,1,2-Trichloroethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	1,1-Dichloroethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	1,1-Dichloroethene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	1,2-Dichloroethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	1,2-Dichloroethene (total)	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	1,2-Dichloropropane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	2-Butanone	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	2-Hexanone	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	4-Methyl-2-pentanone	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Acetone	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Benzene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Bromodichloromethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Bromoform	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Bromomethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Carbon Disulfide	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Carbon Tetrachloride	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Chlorobenzene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Chloroethane	ug/L	120			NA	140			10	390	J		NA	420			50	420
MW-10C	Chloroform	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Chloromethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	cis-1,3-Dichloropropene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Dibromochloromethane	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Ethyl Benzene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Methylene Chloride	ug/L		U	U	100	1.0	J		10	128			NA		U	U	50	128
MW-10C	Styrene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Tetrachloroethene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Toluene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	trans-1,3-Dichloropropene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Trichloroethene	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-10C	Vinyl Chloride	ug/L		U	U	100		U	U	10	129			NA		U	U	50	129
MW-10C	Xylenes (total)	ug/L		U	U	100		U	U	10		U	U	150		U	U	50	150
MW-11	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Bromoform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-11	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Tetrachloroethene	ug/L		U	U	10		U	U	10	1.0	J		10		U	U	10	10
MW-11	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,1,1-Trichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,1,2,2-Tetrachloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,1,2-Trichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,1-Dichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,1-Dichloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,2-Dichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,2-Dichloroethene (total)	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	1,2-Dichloropropane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	2-Butanone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	2-Pentanone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	4-Methyl-2-pentanone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Acetone	ug/L			U	19		U	U	10			U	10		U	U	10	19
MW-12	Benzene	ug/L	5.5			NA		U	U	10	2.0	J		10		U	U	10	10
MW-12	Bromochloromethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Bromoforn	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Bromomethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Carbon Disulfide	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Carbon Tetrachloride	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Chlorobenzene	ug/L	5.0			NA	4.0	J		10	6.0	J		10	5.0	J	J	10	10
MW-12	Chloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Chloroform	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Chloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	cis-1,3-Dichloropropene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Dibromochloromethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Ethyl Benzene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Methylene Chloride	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Styrene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Tetrachloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Toluene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	trans-1,3-Dichloropropene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Trichloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Vinyl Chloride	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Xylenes (total)	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-13	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,1-Dichloroethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,1-Dichloroethene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,2-Dichloroethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	1,2-Dichloropropane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	
MW-13	2-Butanone	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	2-Hexanone	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Acetone	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Benzene	ug/L	6.0	J		NA	170			20	610			50	33			10	610
MW-13	Bromodichloromethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Bromotom	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Bromomethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Carbon Disulfide	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Carbon Tetrachloride	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Chlorobenzene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Chloroethane	ug/L	97			NA	330			20		U		570	160			10	570
MW-13	Chloroform	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Chloromethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Dibromochloromethane	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Ethyl Benzene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Methylene Chloride	ug/L		U	U	10		U	U	20		U	U	50	1.0	J	J	10	50
MW-13	Styrene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Tetrachloroethene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Toluene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Trichloroethene	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Vinyl Chloride	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-13	Xylenes (total)	ug/L		U	U	10		U	U	20		U	U	50		U	U	10	50
MW-14	1,1,1-Trichloroethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,1,2,2-Tetrachloroethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,1,2-Trichloroethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,1-Dichloroethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,1-Dichloroethene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,2-Dichloroethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,2-Dichloroethene (total)	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	1,2-Dichloropropane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	2-Butanone	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	2-Hexanone	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	4-Methyl-2-pentanone	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Acetone	ug/L		U	U	100		J	U	10		J	U	10		U	U	10	100
MW-14	Benzene	ug/L	41	J		NA		J	U	10	1.0	J		10		U	U	10	41
MW-14	Bromodichloromethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Bromotom	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Bromomethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Carbon Disulfide	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Carbon Tetrachloride	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Chlorobenzene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Chloroethane	ug/L	1,000			NA		U	U	10		U	U	10		U	U	10	1,000
MW-14	Chloroform	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Chloromethane	ug/L		U	U	100		U	U	10	2.0	J		10		U	U	10	100
MW-14	cis-1,3-Dichloropropene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Dibromochloromethane	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Ethyl Benzene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Methylene Chloride	ug/L	14	J		NA		U	U	10		U	U	10		U	U	10	14
MW-14	Styrene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Tetrachloroethene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-14	Toluene	ug/L		U	U	100		U	U	10		U	U	10	1.0	J	J	10	100
MW-14	trans-1,3-Dichloropropene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Trichloroethene	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Vinyl Chloride	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-14	Xylenes (total)	ug/L		U	U	100		U	U	10		U	U	10		U	U	10	100
MW-15	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	1,2-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Benzene	ug/L	3.0	J		NA	3.0	J		10	3.0	J		10	4.0	J		10	10
MW-15	Bromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Bromodorm	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Toluene	ug/L		U	U	10		U	U	10	1.0	J		10		U	U	10	10
MW-15	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	1,2-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Bromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Bromodorm	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10



**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-18	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10	5.0	J		10		U	U	10	10
MW-19	Acetone	ug/L		U	U	10	5.0	J		10	12			10		U	U	10	12
MW-19	Benzene	ug/L		U	U	10	5.0	J		10	3.0	J		10	1.0	J	J	10	10
MW-19	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Bromoform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Chloroethane	ug/L	20			NA	14			10	13	J		10	1N			10	20
MW-19	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-22	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	2-Pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Bromoform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Chloroform	ug/L		U	U	10		U	U	10	3.0	U	U	10		U	U	10	10
MW-22	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Dibromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	2-Pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Bromoform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-23	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-23	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Bromotoluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-28	2-Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Acetone	ug/L		U	U	10		U	U	10		J	U	10		U	U	10	10
MW-28	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Bromodifluoromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-28	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	2-Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Benzene	ug/L		U	U	10		U	U	10	3.0	J	U	10		U	U	10	10
MW-29	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Bromodifluoromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Chloroethane	ug/L	2.0	J	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-29	trans-1,3-Dichloropropene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-29	Trichloroethene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-29	Vinyl Chloride	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-29	Xylenes (total)	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,1,1-Trichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,1,2,2-Tetrachloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,1,2-Trichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,1-Dichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,1-Dichloroethene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,2-Dichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,2-Dichloroethene (total)	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	1,2-Dichloropropane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	2-Butanone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	2-Hexanone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	4-Methyl-2-pentanone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Acetone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Benzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Bromodichloromethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Bromoform	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Bromomethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Carbon Disulfide	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Carbon Tetrachloride	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Chlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Chloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Chloroform	ug/L	U	U	U	10	1.0	1	U	10	U	U	U	10	U	U	U	10	10
MW-30	Chloromethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	cis-1,3-Dichloropropene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Dibromochloromethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Ethyl Benzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Methylene Chloride	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Styrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Tetrachloroethene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Toluene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	trans-1,3-Dichloropropene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Trichloroethene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Vinyl Chloride	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-30	Xylenes (total)	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,1,1-Trichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,1,2,2-Tetrachloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,1,2-Trichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,1-Dichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,1-Dichloroethene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,2-Dichloroethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,2-Dichloroethene (total)	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	1,2-Dichloropropane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	2-Butanone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	2-Hexanone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	4-Methyl-2-pentanone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	Acetone	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	Benzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	Bromodichloromethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	Bromoform	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-31	Bromomethane	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-31	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-32	1,1,1-Trichloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,1,2,2-Tetrachloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,1,2-Trichloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,1-Dichloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,1-Dichloroethene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,2-Dichloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,2-Dichloroethene (total)	ug/L			U	10			U	10			U	10			U	10	10
MW-32	1,2-Dichloropropane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	2-Butanone	ug/L			U	10			U	10			U	10			U	10	10
MW-32	2-Hexanone	ug/L			U	10			U	10			U	10			U	10	10
MW-32	4-Methyl-2-pentanone	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Acetone	ug/L			U	10	5.0		J	10			U	10			U	10	10
MW-32	Benzene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Bromodichloromethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Bromodifluoromethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Bromomethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Carbon Disulfide	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Carbon Tetrachloride	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Chlorobenzene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Chloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Chloroform	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Chloromethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	cis-1,3-Dichloropropene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Dibromochloromethane	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Ethyl Benzene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Methylene Chloride	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Styrene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Tetrachloroethene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Toluene	ug/L			U	10	3.0		J	10			U	10			U	10	10
MW-32	trans-1,3-Dichloropropene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Trichloroethene	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Vinyl Chloride	ug/L			U	10			U	10			U	10			U	10	10
MW-32	Xylenes (total)	ug/L			U	10			U	10			U	10			U	10	10
MW-33	1,1,1-Trichloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-33	1,1,2,2-Tetrachloroethane	ug/L			U	10			U	10			U	10			U	10	10
MW-33	1,1,2-Trichloroethane	ug/L			U	10			U	10			U	10			U	10	10

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-33	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Acetone	ug/L		U	U	10	8.0	J		10		J	U	10		U	U	10	10
MW-33	Benzene	ug/L		U	U	10		U	U	10		U	U	10	1.0	J	J	10	10
MW-33	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Bromodiform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Bromomethane	ug/L		U	U	10		U	UJ	10		U	U	10		U	U	10	10
MW-33	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-33	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	UJ	10		U	U	10	10
MW-34	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Acetone	ug/L		U	U	10	7.0	J		10		U	U	10		U	U	10	10
MW-34	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Bromodiform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Bromomethane	ug/L		U	U	10		U	UJ	10		U	U	10		U	U	10	10
MW-34	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Chloroethane	ug/L		U	U	10		U	U	10		U	UJ	10		U	U	10	10
MW-34	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-33	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Toluene	ug/L		U	U	10		U	U	10		U	U	10	1.0	J	J	10	10
MW-34	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-34	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Bromotoluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Toluene	ug/L		U	U	10	1.0	J	J	10		U	U	10		U	U	10	10
MW-36	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-36	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-37	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-37	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-37	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-37	1,1-Dichloroethane	ug/L		U	U	10		U	U	1.0		U	U	10		U		10	10
MW-37	1,1-Dichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-37	1,2-Dichloroethane	ug/L		U	U	10		U	U	1.0		U	U	10		U		10	10
MW-37	1,2-Dichloroethene (total)	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-37	1,2-Dichloropropane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-37	2-Butanone	ug/L		U	R	5.0		U	U	10		U	U	10		U		10	10
MW-37	2-Hexanone	ug/L		U	R	5.0		U	U	10		U	U	10		U		10	10



**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-37	4-Methyl-2-pentanone	ug/L		U	R	5.0		U	U	10		U	U	10			UJ	10	10
MW-37	Acetone	ug/L		U	R	5.0		U	U	10		U	U	10			U	10	10
MW-37	Benzene	ug/L		U		0.10		U	U	10		U	U	10			U	10	10
MW-37	Bromodichloromethane	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Bromodorm	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Bromomethane	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Carbon Disulfide	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Carbon Tetrachloride	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Chlorobenzene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Chloroethane	ug/L		U		1.0		U	U	10		U	UJ	10			U	10	10
MW-37	Chlorodorm	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Chloromethane	ug/L		U	U	1.0		U	U	10		U	U	10			U	10	10
MW-37	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Dibromochloromethane	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Ethyl Benzene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Methylene Chloride	ug/L		U		2.0		U	U	10		U	U	10			U	10	10
MW-37	Styrene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Tetrachloroethene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Toluene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Trichloroethene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Vinyl Chloride	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-37	Xylenes (total)	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-38	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,1-Dichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,1-Dichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,2-Dichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,2-Dichloroethene (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	1,2-Dichloropropane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	2-Butanone	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	2-Hexanone	ug/L		U		5.0		U	U	10		U	U	10		U	U	10	10
MW-38	4-Methyl-2-pentanone	ug/L		U	R	5.0		U	U	10		U	U	10		U	U	10	10
MW-38	Acetone	ug/L	8.0		R	NA		U	U	10		U	U	10		U	U	10	10
MW-38	Benzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Bromodichloromethane	ug/L		U	U	1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Bromodorm	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Bromomethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Carbon Disulfide	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Carbon Tetrachloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Chlorobenzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Chloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Chlorodorm	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Chloromethane	ug/L	0.80	J	U	NA		U	U	10		U	U	10		U	U	10	10
MW-38	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Dibromochloromethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Ethyl Benzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Methylene Chloride	ug/L	0.30	J	U	NA		U	U	10		U	U	10		U	U	10	10
MW-38	Styrene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Tetrachloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Toluene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	
MW-38	Trichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Vinyl Chloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-38	Xylenes (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	1,1-Dichloroethane	ug/L	0.30		J	NA		U	U	10		U	U	10		U	U	10	10
MW-39	1,1-Dichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	1,2-Dichloroethane	ug/L	0.70	J	U	NA		U	U	10		U	U	10		U	U	10	10
MW-39	1,2-Dichloroethene (total)	ug/L		U		1.0	3.0	J	J	10	4.0	J		10	4.0	J		10	10
MW-39	1,2-Dichloropropane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	2-Butanone	ug/L		U		5.0		U	U	10		U	U	10		U	U	10	10
MW-39	2-Hexanone	ug/L		U		5.0		U	U	10		U	U	10		U	U	10	10
MW-39	4-Methyl-2-pentanone	ug/L		U	R	5.0		U	U	10		U	U	10		U	U	10	10
MW-39	Acetone	ug/L	8.0	U	R	1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Benzene	ug/L	12			NA	4.0	J	J	10	5.0	J		10	4.0	J		10	12
MW-39	Bromodichloromethane	ug/L		U	U	1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Bromoform	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Bromomethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Carbon Disulfide	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Carbon Tetrachloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Chlorobenzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Chloroethane	ug/L	5.0			NA		U	U	10	3.0	J	J	10	2.0	J		10	10
MW-39	Chloroform	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Chloromethane	ug/L	1.0		U	NA		U	U	10		U	U	10		U	U	10	10
MW-39	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Dibromochloromethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Ethyl Benzene	ug/L		U	U	1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Methylene Chloride	ug/L	0.40	J	U	NA		U	U	10		U	U	10		U	U	10	10
MW-39	Styrene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Tetrachloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Toluene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Trichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-39	Vinyl Chloride	ug/L	0.90	J		NA		U	U	10		U	U	10		U	U	10	10
MW-39	Xylenes (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-40	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,1-Dichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,1-Dichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,2-Dichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,2-Dichloroethene (total)	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	1,2-Dichloropropane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	2-Butanone	ug/L		U	R	5.0		U	U	10		U	U	10		U		10	10
MW-40	2-Hexanone	ug/L		U	R	5.0		U	U	10		U	U	10		U		10	10
MW-40	4-Methyl-2-pentanone	ug/L		U	R	5.0		U	U	10		U	U	10		U		10	10
MW-40	Acetone	ug/L	9.0		R	NA		U	U	10		U	U	10		U		13	13
MW-40	Benzene	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	Bromodichloromethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	Bromoform	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	Bromomethane	ug/L		U		1.0		U	U	10		U	U	10		U		10	10
MW-40	Carbon Disulfide	ug/L		U		1.0		U	U	10		U	U	10		U		10	10

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-40	Carbon Tetrachloride	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Chlorobenzene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Chloroethane	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Chloroform	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Chloromethane	ug/L			U	1.0		U	U	10		U	U	10			U	10	10
MW-40	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Dibromochloromethane	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Ethyl Benzene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Methylen Chloride	ug/L		U		2.0		U	U	10		U	U	10			U	10	10
MW-40	Styrene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Tetrachloroethene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Toluene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Trichloroethene	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Vinyl Chloride	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-40	Xylenes (total)	ug/L		U		1.0		U	U	10		U	U	10			U	10	10
MW-41	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,1 Dichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,1 Dichloroethene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,2 Dichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,2 Dichloroethene (total)	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	1,2 Dichloropropene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	2-Butanone	ug/L		U	R	5.0		U	U	10			U	10			U	10	10
MW-41	2-Hexanone	ug/L		U	R	5.0		U	U	10			U	10			U	10	10
MW-41	4-Methyl-2-pentanone	ug/L		U	R	5.0		U	U	10			U	10			U	10	10
MW-41	Acetone	ug/L	1.0		R	NA		U	U	10			U	10			U	10	10
MW-41	Benzene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Bromochloromethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Bromotoluene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Bromomethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Carbon Disulfide	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Carbon Tetrachloride	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Chlorobenzene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Chloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Chloroform	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Chloromethane	ug/L			U	1.0		U	U	10			U	10			U	10	10
MW-41	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Dibromochloromethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Ethyl Benzene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Methylen Chloride	ug/L		U		2.0		U	U	10			U	10			U	10	10
MW-41	Styrene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Tetrachloroethene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Toluene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Trichloroethene	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Vinyl Chloride	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-41	Xylenes (total)	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-42	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-42	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-42	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10
MW-42	1,1 Dichloroethane	ug/L		U		1.0		U	U	10			U	10			U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-42	1,1-Dichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	1,2-Dichloroethane	ug/L		U	U	1.0		U	U	10		U	U	10		U	U	10	10
MW-42	1,2-Dichloroethene (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	1,2-Dichloropropane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	2-Butanone	ug/L		U	R	5.0		U	U	10		U	U	10		U	UJ	10	10
MW-42	2-Hexanone	ug/L		U		5.0		U	U	10		U	U	10		U	UJ	10	10
MW-42	4-Methyl 2-pentanone	ug/L		U	R	5.0		U	U	10		U	U	10		U	UJ	10	10
MW-42	Acetone	ug/L	6.0	U	U	1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Benzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Bromochloromethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Bromoform	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Bromomethane	ug/L		U		1.0		U	UJ	10		U	U	10		U	U	10	10
MW-42	Carbon Disulfide	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Carbon Tetrachloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Chlorobenzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Chloroethane	ug/L				1.0		U	U	10		UJ	U	10		U	U	10	10
MW-42	Chloroform	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Chloromethane	ug/L			U	1.0		U	U	10		U	U	10		U	U	10	10
MW-42	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Dibromochloromethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Ethyl Benzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Methylene Chloride	ug/L		U		2.0		U	U	10		U	U	10		U	U	10	10
MW-42	Styrene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Tetrachloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Toluene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Trichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Vinyl Chloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-42	Xylenes (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,1,1-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,1,2-Trichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,1-Dichloroethane	ug/L		U	U	1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,1-Dichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,2-Dichloroethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,2-Dichloroethene (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	1,2-Dichloropropane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	2-Butanone	ug/L		U		5.0		U	U	10		U	U	10		U	UJ	10	10
MW-43	2-Hexanone	ug/L		U		5.0		U	U	10		U	U	10		U	UJ	10	10
MW-43	4-Methyl 2-pentanone	ug/L		U		5.0		U	U	10		U	U	10		U	UJ	10	10
MW-43	Acetone	ug/L	7.0		R	NA		U	U	10		U	U	10		U	U	10	10
MW-43	Benzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Bromochloromethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Bromoform	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Bromomethane	ug/L		U		1.0		U	UJ	10		U	U	10		U	U	10	10
MW-43	Carbon Disulfide	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Carbon Tetrachloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Chlorobenzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Chloroethane	ug/L		U		1.0		U	U	10		U	UJ	10		U	U	10	10
MW-43	Chloroform	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Chloromethane	ug/L	0.60	J	UJ	NA		U	U	10		U	U	10		U	U	10	10
MW-43	cis-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Dibromochloromethane	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-43	Ethyl Benzene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Methylene Chloride	ug/L		U		2.0		U	U	10		U	U	10		U	U	10	10
MW-43	Styrene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Tetrachloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Toluene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	trans-1,3-Dichloropropene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Trichloroethene	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Vinyl Chloride	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-43	Xylenes (total)	ug/L		U		1.0		U	U	10		U	U	10		U	U	10	10
MW-44	1,1,1-Trichloroethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	1,1,2,2-Tetrachloroethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	1,1,2-Trichloroethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	1,1-Dichloroethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	1,1-Dichloroethene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	1,2-Dichloroethane	ug/L		U	U	1.0		U		10		U	U	10		U	U	10	10
MW-44	1,2-Dichloroethene (total)	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	1,2-Dichloropropane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	2-Butanone	ug/L		U	R	5.0		U		10		U	U	10		U	U	10	10
MW-44	2-Hexanone	ug/L		U		5.0		U		10		U	U	10		U	U	10	10
MW-44	4-Methyl-2-pentanone	ug/L		U		5.0		U		10		U	U	10		U	U	10	10
MW-44	Acetone	ug/L		U	R	5.0	ND	U		NA		U	U	10		U	U	10	10
MW-44	Benzene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Bromodichloromethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Bromoform	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Bromomethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Carbon Disulfide	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Carbon Tetrachloride	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Chlorobenzene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Chloroethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Chloroform	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Chloromethane	ug/L		J	U	1.0		U		10		U	U	10		U	U	10	10
MW-44	cis-1,3-Dichloropropene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Dibromodichloromethane	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Ethyl Benzene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Methylene Chloride	ug/L		U		2.0		U		10		U	U	10		U	U	10	10
MW-44	Styrene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Tetrachloroethene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Toluene	ug/L		U	U	1.0		U		10		U	U	10		U	U	10	10
MW-44	trans-1,3-Dichloropropene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Trichloroethene	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Vinyl Chloride	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-44	Xylenes (total)	ug/L		U		1.0		U		10		U	U	10		U	U	10	10
MW-45	1,1,1-Trichloroethane	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	1,1,2,2-Tetrachloroethane	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	1,1,2-Trichloroethane	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	1,1-Dichloroethane	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	1,1-Dichloroethene	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	1,2-Dichloroethane	ug/L		J	U	20		U		80		U	U	80		U	U	80	80
MW-45	1,2-Dichloroethene (total)	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	1,2-Dichloropropane	ug/L		U		25		U		80		U	U	80		U	U	80	80
MW-45	2-Butanone	ug/L		U	R	120		U		80		U	U	80		U	U	80	120
MW-45	2-Hexanone	ug/L		U		120		U		80		U	U	80		U	U	80	120
MW-45	4-Methyl-2-pentanone	ug/L		U		120		U		80		U	U	80		U	U	80	120

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-45	Acetone	ug/L	170		R	NA			U	80			U	80			U	80	170
MW-45	Benzene	ug/L	530			NA	1,045			NA	940			80	860			80	1,045
MW-45	Bromodichloromethane	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Bromoform	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Bromomethane	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Carbon Disulfide	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Carbon Tetrachloride	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Chlorobenzene	ug/L	16	J		NA	25			NA	42	J		80	26	J	J	80	80
MW-45	Chloroethane	ug/L	82		J	NA	215			NA	120		J	80	120			80	215
MW-45	Chloroform	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Chloromethane	ug/L		U		25			U	80			U	80			U	80	80
MW-45	cis-1,3-Dichloropropene	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Dibromochloromethane	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Ethyl Benzene	ug/L	10	J		NA			U	80			U	80			U	80	80
MW-45	Methylene Chloride	ug/L		U		50			U	80			U	80			U	80	80
MW-45	Styrene	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Tetrachloroethene	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Toluene	ug/L		U		25			U	80			U	80			U	80	80
MW-45	trans-1,3-Dichloropropene	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Trichloroethene	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Vinyl Chloride	ug/L		U		25			U	80			U	80			U	80	80
MW-45	Xylenes (total)	ug/L	60			NA	60			NA	280			80	33	J	J	80	280
MW-46	1,1,1-Trichloroethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	1,1,2,2-Tetrachloroethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	1,1,2-Trichloroethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	1,1-Dichloroethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	1,1-Dichloroethene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	1,2-Dichloroethane	ug/L	0.30	J	U	NA			U	10			U	10			U	10	10
MW-46	1,2-Dichloroethene (total)	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	1,2-Dichloropropene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	2-Butanone	ug/L		U		5.0			U	10			U	10			U	10	10
MW-46	2-Hexanone	ug/L		U		5.0			U	10			U	10			U	10	10
MW-46	4-Methyl-2-pentanone	ug/L	3.0	J	J	NA			U	10			U	10			U	10	10
MW-46	Acetone	ug/L	8.0		R	NA			J	10			U	10			U	10	10
MW-46	Benzene	ug/L	0.80	J		NA	1.0	J		10	2.0	J		10	2.0	J		10	10
MW-46	Bromodichloromethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Bromoform	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Bromomethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Carbon Disulfide	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Carbon Tetrachloride	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Chlorobenzene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Chloroethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Chloroform	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Chloromethane	ug/L	0.60	J	U	NA			U	10			U	10			U	10	10
MW-46	cis-1,3-Dichloropropene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Dibromochloromethane	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Ethyl Benzene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Methylene Chloride	ug/L		U		2.0			U	10			U	10			U	10	10
MW-46	Styrene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Tetrachloroethene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Toluene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	trans-1,3-Dichloropropene	ug/L		U		1.0			U	10			U	10			U	10	10
MW-46	Trichloroethene	ug/L		U		1.0			U	10			U	10			U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
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American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Highest Detection
MW-46	Vinyl Chloride	ug/L	0.20	1	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-46	Xylenes (total)	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	1,1,1-Trichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	1,1,2-Trichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	1,1-Dichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	1,2-Dichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	1,2-Dichloroethane (total)	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	2-Butanone	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	2-Hexanone	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	4-Methyl-2-pentanone	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Acetone	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Benzene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Bromodichloromethane	ug/L	U	U	U	5.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Bromochloromethane	ug/L	U	U	U	5.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Bromomethane	ug/L	U	U	U	5.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Carbon Disulfide	ug/L	U	U	U	NA	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Carbon Tetrachloride	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Chlorobenzene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Chloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Chloroform	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	cis-1,3-Dichloropropene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Dibromodichloromethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Ethyl Benzene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Methylene Chloride	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Styrene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Tetrahydrofuran	ug/L	U	U	U	NA	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Toluene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	trans-1,3-Dichloropropene	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Trichloroethene	ug/L	U	U	U	NA	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-47	Vinyl Chloride	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Xylenes (total)	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	1,1,1-Trichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	1,1,2-Trichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	1,1-Dichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	1,2-Dichloroethane	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	1,2-Dichloroethane (total)	ug/L	U	U	U	1.0	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	2-Butanone	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	2-Hexanone	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	4-Methyl-2-pentanone	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Acetone	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Benzene	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Bromodichloromethane	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Bromochloromethane	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Bromomethane	ug/L	U	U	U	500	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-48	Carbon Disulfide	ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48	Carbon Tetrachloride	ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	500
MW-48		ug/L	U	U	U	2,500	U	U	U	500	U	U	U	500	U	U	U	500	

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-48	Chlorobenzene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Chloroethane	ug/L	1,000			NA	620			500	670		J	500	NRD			500	1,000
MW-48	Chloroform	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Chloromethane	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	cis-1,3-Dichloropropene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Dibromochloromethane	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Ethyl Benzene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Methylene Chloride	ug/L	70	J		NA		U	U	500		U	U	500		U	U	500	500
MW-48	Styrene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Tetrachloroethene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Toluene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	trans-1,3-Dichloropropene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Trichloroethene	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Vinyl Chloride	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-48	Xylenes (total)	ug/L		U		500		U	U	500		U	U	500		U	U	500	500
MW-49	1,1,1-Trichloroethane	ug/L		U		500		U	U	100			U	325		UJ		450	500
MW-49	1,1,2,2-Tetrachloroethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	1,1,2-Trichloroethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	1,1-Dichloroethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	1,1-Dichloroethene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	1,2-Dichloroethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	1,2-Dichloroethene (total)	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	1,2-Dichloropropane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	2-Butanone	ug/L		U	R	2,500		U	U	100			U	325			U	450	2,500
MW-49	2-Hexanone	ug/L		U	R	2,500		U	U	100			U	325		UJ		450	2,500
MW-49	4-Methyl-2-pentanone	ug/L		U	R	2,500		U	U	100			U	325			U	450	2,500
MW-49	Acetone	ug/L		U	R	2,500		U	U	100			U	325			U	450	2,500
MW-49	Benzene	ug/L	5,000			NA	1,600			100	5,500	J		NA	6,750			NA	6,750
MW-49	Bromodichloromethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Bromoform	ug/L		U		500			U	100			U	325			U	450	500
MW-49	Bromomethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Carbon Disulfide	ug/L		U		500		U	U	100			U	325			UJ	450	500
MW-49	Carbon Tetrachloride	ug/L		U		500			U	100			U	325			UJ	450	500
MW-49	Chlorobenzene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Chloroethane	ug/L	480	J		NA	310			100	715	J		NA	665			NA	715
MW-49	Chloroform	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Chloromethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	cis-1,3-Dichloropropene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Dibromochloromethane	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Ethyl Benzene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Methylene Chloride	ug/L		J	U	70		U	U	100			U	325			UJ	450	450
MW-49	Styrene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Tetrachloroethene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Toluene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	trans-1,3-Dichloropropene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Trichloroethene	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Vinyl Chloride	ug/L		U		500		U	U	100			U	325			U	450	500
MW-49	Xylenes (total)	ug/L		U		500		U	U	100			U	325			U	450	500
MW-50	1,1,1-Trichloroethane	ug/L		U	U	10			U	10			U	10		U		10	10
MW-50	1,1,2,2-Tetrachloroethane	ug/L		U	U	10			U	10			U	10		U		10	10
MW-50	1,1,2-Trichloroethane	ug/L		U	U	10			U	10			U	10		U		10	10
MW-50	1,1-Dichloroethane	ug/L		U	U	10			U	10			U	10		U		10	10
MW-50	1,1-Dichloroethene	ug/L		U	U	10			U	10			U	10		U		10	10



**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	
MW-50	1,2-Dichloroethane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	1,2-Dichloroethene (total)	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	1,2-Dichloropropane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	2-Butanone	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	2-Hexanone	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	4-Methyl-2-pentanone	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Acetone	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Benzene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Bromodichloromethane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Bromotoluene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Bromomethane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Carbon Disulfide	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Carbon Tetrachloride	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Chlorobenzene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Chloroethane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Chloroform	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Chloromethane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	cis-1,4-Dichloropropene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Dibromochloromethane	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Ethyl Benzene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Methylene Chloride	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Styrene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Tetrachloroethene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Toluene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	trans-1,3-Dichloropropene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Trichloroethene	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Vinyl Chloride	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-50	Xylenes (total)	ug/L		U	U	10			U	10		U	U	10		U		10	10
MW-51	1,1,1-Trichloroethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,1,2,2-Tetrachloroethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,1,2-Trichloroethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,1-Dichloroethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,1-Dichloroethene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,2-Dichloroethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,2-Dichloroethene (total)	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	1,2-Dichloropropane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	2-Butanone	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	2-Hexanone	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	4-Methyl-2-pentanone	ug/L			U	100		U	U	50	4.0	J		10		U	U	100	100
MW-51	Acetone	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Benzene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Bromodichloromethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Bromotoluene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Bromomethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Carbon Disulfide	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Carbon Tetrachloride	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Chlorobenzene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Chloroethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Chloroform	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Chloromethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	cis-1,4-Dichloropropene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Dibromochloromethane	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Ethyl Benzene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	
MW-51	Methylene Chloride	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Styrene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Tetrachloroethene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Toluene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	trans-1,3-Dichloropropene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Trichloroethene	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Vinyl Chloride	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-51	Xylenes (total)	ug/L			U	100		U	U	50		U	U	10		U	U	100	100
MW-52	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,1-Dichloroethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,1-Dichloroethene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,2-Dichloroethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	1,2-Dichloropropane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	2-Butanone	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	2-Hexanone	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Acetone	ug/L	22			NA		U	U	50		U	U	10		U	U	100	100
MW-52	Benzene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Bromodichloromethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Bromotoluene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Bromomethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Carbon Disulfide	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Carbon Tetrachloride	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Chlorobenzene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Chloroethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Chloroform	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Chloromethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Dibromochloromethane	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Ethyl Benzene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Methylene Chloride	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Styrene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Tetrachloroethene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Toluene	ug/L	3.0	J	J	NA		U	U	50		U	U	10		U	U	100	100
MW-52	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Trichloroethene	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Vinyl Chloride	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-52	Xylenes (total)	ug/L		U	U	10		U	U	50		U	U	10		U	U	100	100
MW-53	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10	5.0	J	J	10	10
MW-53	Acetone	ug/L	11			NA	9.5			NA	16			10		U		12	16

**Appendix C**  
**Maximum Concentrations of Volatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	
MW-53	Benzene	ug/L		U	U	10		U	U	10	1.0	J		10	2.0	J		10	10
MW-53	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Bromotorm	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		J	U	10	10
MW-53	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Toluene	ug/L	1.0	J	J	NA		U	U	10		U	U	10	1.0	J		10	10
MW-53	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-53	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,1,1-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,1,2,2-Tetrachloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,1,2-Trichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,2-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,2-Dichloroethene (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	1,2-Dichloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	2-Butanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	2-Hexanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	4-Methyl-2-pentanone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Acetone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Bromodichloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Bromotorm	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Bromomethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Carbon Disulfide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Carbon Tetrachloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Chlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Chloroethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Chloroform	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Chloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	cis-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Dibromochloromethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Ethyl Benzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Methylene Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Styrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Tetrachloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Toluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	trans-1,3-Dichloropropene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Trichloroethene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-54	Vinyl Chloride	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentrations of Volatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-54	Xylenes (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,1,1 Trichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,1,2,2 Tetra chloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,1,2 Trichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,1 Dichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,1 Dichloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,2 Dichloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,2 Dichloroethene (total)	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	1,2 Dichloropropane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	2 Butanone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	2 Hexanone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	4 Methyl 2 pentanone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Acetone	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Benzene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Bromochloromethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Bromotoluene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Bromomethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Carbon Disulfide	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Carbon Tetrachloride	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Chlorobenzene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Chloroethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Chlorotoluene	ug/L			U	10	1.0	J		10		U	U	10		U	U	10	10
MW-55	Chloromethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	cis-1,3-Dichloropropene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Dibromochloromethane	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Ethyl Benzene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Methylene Chloride	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Styrene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Tetrachloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Toluene	ug/L			U	10		U	U	10		U	U	10	1.0	J		10	10
MW-55	trans-1,3-Dichloropropene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Trichloroethene	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Vinyl Chloride	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-55	Xylenes (total)	ug/L			U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-1S	1,2,4-Trichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	1,2-Dichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	1,3-Dichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	1,4-Dichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,2'-methylenebis(4-Chlorophenol)	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,4,5-Trichlorophenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	2,4,6-Trichlorophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,4-Dichlorophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,4-Dimethylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,4-Dinitrophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,4-Dinitrophenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	2,4-Dinitrophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2,6-Dinitrophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2-Chloromethylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2-Chlorophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2-Methoxyphenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2-Methylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	2-Nitrophenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	2-Nitrophenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	3,3'-Dichlorodiphenylmethane	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	3-Nitrophenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	4,6-Dinitro-2-methylphenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	4-Bromophenyl-phenylether	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	4-Chloro-3-methylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	4-Chloroaniline	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	4-Chlorophenyl-phenyl ether	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	4-Methylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	4-Nitroaniline	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	4-Nitrophenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
M-1S	Acetophenone	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	Acetophenone	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
M-1S	Acetophenone	ug/L	NA				U	U	10										

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-1S	Pentachlorophenol	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	Phenanthrene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Phenol	ug/L	NA				U	U		10	U	U		10	14			10	14
M-1S	Pyrene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	1,2,4-Trichlorobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	1,2-Dichlorobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	1,3-Dichlorobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	1,4-Dichlorobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2,2'-methylenebis(4-Chloropropionic)	ug/L	NA				U			10	3.0	J		10	8.5			NA	10
M-1S	2,4,5-Trichlorophenol	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	2,4,6-Trichlorophenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2,4-Dichlorophenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2,4-Dimethylphenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2,4-Dinitrophenol	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	2,4-Dinitrobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2,6-Dinitrobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2-Chloronaphthalene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2-Chlorophenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2-Methylnaphthalene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2-Methylphenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	2-Nitroaniline	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	2-Nitrophenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	3,3'-Dichlorobenzidine	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	3-Nitroaniline	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	4,6-Dinitro-2-methylphenol	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	4-Bromophenyl-phenylether	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	4-Chloro-3-methylphenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	4-Chloroaniline	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	4-Chlorophenyl-phenyl ether	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	4-Methylphenol	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	4-Nitroaniline	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	4-Nitrophenol	ug/L	NA				U	U		25	U	U		25	U	U		25	25
M-1S	Acenaphthene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Acenaphthylene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Anthracene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Benzo(a)anthracene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Benzo(a)pyrene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Benzo(b)fluoranthene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Benzo(g,h,i)perylene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Benzo(k)fluoranthene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	benz(2-Chlorophenyl)methane	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	benz(2-Chlorophenyl) ether	ug/L	NA				10	J		10	U	U		10	20			NA	10
M-1S	benz(2-Ethylthiophenyl) ether	ug/L	NA				U			10	U	U		10	U	U		10	10
M-1S	Butylphenylphthalate	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Carbazole	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Chrysene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Di-n-butylphthalate	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Di-n-octylphthalate	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Dibenz(a,h)anthracene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Dibenzofuran	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Diethylphthalate	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Dimethylphthalate	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Fluoranthene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Fluorene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Hexachlorobenzene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Hexachlorobutadiene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Hexachlorocyclopentadiene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Hexachlorocyclopentadiene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Indeno(1,2,3-cd)pyrene	ug/L	NA				U	U		10	U	U		10	U	U		10	10
M-1S	Isophthalic	ug/L	NA				3.1			NA	U	U		10	U	U		10	10

## Appendix C

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	
M-15	N-Nitrosodimethylamine	ug/L	NA					U	10			U	10			U	10	10	
M-15	N-Nitrosodiphenylamine	ug/L	NA					U	10			U	10			U	10	10	
M-15	Naphthalene	ug/L	NA					U	10			U	10			U	10	10	
M-15	Nitrobenzene	ug/L	NA					U	10			U	10			U	10	10	
M-15	Phenanthroline	ug/L	NA					U	25			U	25			U	25	25	
M-15	Phenanthrene	ug/L	NA					U	10			U	10			U	10	10	
M-15	Phenol	ug/L	NA				20	J	J	10		U	10	16			NA	16	
M-15	Pyrene	ug/L	NA					U	10			U	10			U	10	10	
M-41	1,2,4-Trichlorobenzene	ug/L	NA					U	10			U	10			U	10	10	
M-41	1,3-Dichlorobenzene	ug/L	NA					U	10			U	10			U	10	10	
M-41	1,3-Dichlorobenzene	ug/L	NA					U	10			U	10			U	10	10	
M-41	1,3-Dichlorobenzene	ug/L	NA					U	10			U	10			U	10	10	
M-41	1,4-Dichlorobenzene	ug/L	NA					U	10			U	10			U	10	10	
M-41	2,2'-methylene-bis(4-chlorophenol)	ug/L	NA					U	10			U	10			U	10	10	
M-41	2,4,5-Trichlorophenol	ug/L	NA					U	25			U	25			U	25	25	
M-41	2,4,6-Trichlorophenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2,4-Dichlorophenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2,4-Dimethylphenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2,4-Dimethylphenol	ug/L	NA					U	25			U	25			U	25	25	
M-41	2,4-Dimethylphenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2,6-Dimethylphenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2-Chloronaphthalene	ug/L	NA					U	10			U	10			U	10	10	
M-41	2-Chlorophenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2-Methylnaphthalene	ug/L	NA					U	10			U	10			U	10	10	
M-41	2-Methylphenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	2-Nitroaniline	ug/L	NA					U	25			U	25			U	25	25	
M-41	2-Nitrophenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	3,3'-Dichlorobenzidine	ug/L	NA					U	10			U	10			U	10	10	
M-41	3-Nitroaniline	ug/L	NA					U	25			U	25			U	25	25	
M-41	4,6-Dinitro-2-methylphenol	ug/L	NA					U	25			U	25			U	25	25	
M-41	4-Bromophenyl-phenylether	ug/L	NA					U	10			U	10			U	10	10	
M-41	4-Chloro-3-methylphenol	ug/L	NA					U	10			U	10			U	10	10	
M-41	4-Chloroaniline	ug/L	NA					U	10			U	10			U	10	10	

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M 10	Hexachlorocyclopentadiene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Hexachloroethane	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Indeno(1,2,3-cd)pyrene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Isophthalic	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	N-Nitroso-di-n-propylamine	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	N-Nitrosodiphenylamine	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Naphthalene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Nitrobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Octachlorophenol	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 40	Phenanthrene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 40	Phenol	ug/L	NA				16		10		8.0		10		14		10		16
M 40	Pyrene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	1,2,4-Trichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	1,2-Dichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	1,3-Dichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	1,4-Dichlorobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2,2'-methylenebis(4-chlorophenol)	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2,4,5-Trichlorophenol	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	2,4,6-Trichlorophenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2,4-Dichlorophenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2,4-Dimethylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2,4-Dinitrophenol	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	2,4-Dinitroanisole	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2,6-Dinitroanisole	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2-Chloronaphthalene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2-Chlorophenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2-Methylnaphthalene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2-Methylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	2-Nitroanisole	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	2-Nitrophenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	3,3'-Dichlorobenzidine	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	3-Nitroanisole	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	4,6-Dinitro-2-methylphenol	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	4-Bromophenyl-phenyl ether	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	4-Chloro-3-methylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	4-Chloroanisole	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	4-Chlorophenyl-phenyl ether	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	4-Methylphenol	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	4-Nitroanisole	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	4-Nitrophenol	ug/L	NA				U	U	25		U	U	25		U	U	25		25
M 45	Acenaphthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Acenaphthylene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Anthracene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Benzofluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Benz(a)pyrene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Benz(b)fluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Benz(b)fluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Benz(b)fluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Benz(b)fluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	benz(2-chloroethoxy)fluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	benz(2-chloroethyl) ether	ug/L	NA				45		10		71		10		U	U	10		71
M 45	benz(2-ethylhexyl)phthalate	ug/L	NA				U		10		J	U	10		JB	U	10		10
M 45	Butylbenzylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Carbazole	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Chrysene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Di-n-butylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Di-n-octylphthalate	ug/L	NA				U		10		U	U	10		U	U	10		10
M 45	Dibenz(a,h)anthracene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Dibenz(a,h)anthracene	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Dichlorophthalate	ug/L	NA				U	U	10		U	U	10		U	U	10		10
M 45	Dimethylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10		10



**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	
M-45	Fluoranthene	ug/L	NA						10				10				10	10	
M-45	Fluorene	ug/L	NA						10				10				10	10	
M-45	Hexachlorobenzene	ug/L	NA						10				10				10	10	
M-45	Hexachlorobutadiene	ug/L	NA						10				10			U	10	10	
M-45	Hexachlorocyclopentadiene	ug/L	NA						10				10			U	10	10	
M-45	Hexachlorocyclohexene	ug/L	NA						10				10			U	10	10	
M-45	Indeno[1,2,3-cd]pyrene	ug/L	NA						10				10			U	10	10	
M-45	Isophthalene	ug/L	NA						10				10			U	10	10	
M-45	N-Nitroso-d-nonylamine	ug/L	NA						10				10			U	10	10	
M-45	N-Nitrosodiphenylamine	ug/L	NA						10				10			U	10	10	
M-45	Naphthalene	ug/L	NA						10				10			U	10	10	
M-45	Nitrobenzene	ug/L	NA						10				10			U	10	10	
M-45	Phenanthrene	ug/L	NA						25				25			U	25	25	
M-45	Phenanthrene	ug/L	NA						10				10			U	10	10	
M-45	Phenol	ug/L	NA				18		10				10	25			10	25	
M-45	Pyrene	ug/L	NA						10				10			U	10	10	
MW-06	1,2,4-Trichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2,2'-methylene-bis(4-chlorophenyl)	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2,4-Dimethylphenol	ug/L		U	U	10		U	U	10		U	U	20	3.0	J	U	10	20
MW-06	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	2,4-Dinitrochlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2,6-Dinitrochlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2-Chloronaphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2-Chlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2-Methylnaphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	2-Nitrobenzene	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	3,3'-Dichlorobenzidine	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	3-Nitrobenzene	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	3,6-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	4-Bromophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	4-Chloro-1-methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	4-Chloronitrobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	4-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Anthracene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Benzofuran</																		

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-06	1,1-Dichloroethene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	1,1-Dichloroethane	ug/L	2.0	J		NA		U	U	10		U	U	20		U	U	10	20
MW-06	1,1-Dichloroethane	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Fluoranthene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Fluorene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Indeno[1,2,3-cd]pyrene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Inorganic	ug/L	15			NA	2.0	J		10		U	U	20	2.0	J		10	20
MW-06	N-Nitrosodimethylamine	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	N-Nitrosodiphenylamine	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Naphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Nitrobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Pentafluorophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	25	50
MW-06	Phenanthrene	ug/L		U	U	10		U	U	10		U	U	20		U	U	10	20
MW-06	Phenol	ug/L		U	U	10		U	U	17		J		20	10			10	60
MW-06	Pyrene	ug/L		U	U	10		U	U	10		U	U	20	10			10	20
MW-07	1,2,4-Trichlorobenzene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	1,2-Dichlorobenzene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	1,3-Dichlorobenzene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	1,4-Dichlorobenzene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2,2'-bis(phenyl)-Chloropropane	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2,4,5-Trichlorophenol	ug/L	NA					U	U	25		U	U	25		U	U	25	25
MW-07	2,4,6-Trichlorophenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2,4-Dichlorophenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2,4-Dinitrophenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2,4-Dinitrochlorobenzene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2,6-Dinitrochlorobenzene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2-Chloronaphthalene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2-Chlorophenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2-Methylnaphthalene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2-Methylphenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	2-Nitroaniline	ug/L	NA					U	U	25		U	U	25		U	U	25	25
MW-07	3-Nitrophenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	3,3'-Dichlorobenzidine	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	3-Nitroaniline	ug/L	NA					U	U	25		U	U	25		U	U	25	25
MW-07	4,6-Dinitro-2-methylphenol	ug/L	NA					U	U	25		U	U	25		U	U	25	25
MW-07	4-Bromophenyl-phenylether	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	4-Chloro-1-methylphenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	4-Chloroaniline	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	4-Chlorophenyl-phenylether	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	4-Methylphenol	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	4-Nitroaniline	ug/L	NA					U	U	25		U	U	25		U	U	25	25
MW-07	4-Nitrophenol	ug/L	NA					U	U	25		U	U	25		U	U	25	25
MW-07	Acenaphthene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Acenaphthylene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Anthracene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Benzo[a]anthracene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Benzo[a]pyrene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Benzo[b]fluoranthene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Benzo[g,h,i]perylene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Benzo[k]fluoranthene	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	bis(2-Chloroethyl)urethane	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	bis(2-Chloroethyl) ether	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	bis(2-Ethylhexyl)phthalate	ug/L	NA					U	U	10	2.0	J		10		U	U	10	10
MW-07	Butylbenzylphthalate	ug/L	NA					U	U	10		U	U	10		U	U	10	10

### Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				High-detect
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-07	Cathacole	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Chrysene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Di-n-butylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Di-n-octylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Dibenz(a,h)anthracene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Dibenzofuran	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Dichthylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Dioctylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Dinaphthylphthalate	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Fluoranthene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Fluorene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Hexachlorodibenzene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Hexachlorodibenzanthracene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Hexachlorodicyclopentadiene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Hexachloronaphthalene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Indenol(1,2,3-cd)pyrene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Isophenone	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	N-Nitroso-di-n-propylamine	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	N-Nitrosodiphenylamine	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Naphthalene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Nitrobenzene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Pentafluorophenol	ug/L	NA				U	U	25		U	U	25		U	U	25	25	
MW-07	Phenanthrene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-07	Phenol	ug/L	NA				70		10		31		10		48		10	70	
MW-07	Pyrene	ug/L	NA				U	U	10		U	U	10		U	U	10	10	
MW-08	1,2,4-Trichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,2'-oxybis(1-Chloropropene)	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	50	50
MW-08	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	50	50
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	20	20
MW-08	2,4-Dinitrophenol	ug/L		U	U	10													

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

[illegible]

## Griffith, Indiana

[illegible]

**Griffith, Indiana**

[illegible]

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-11	4-Chlorophenyl-phenyl ether	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	4-Methylphenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	4-Nitroaniline	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-11	4-Nitrophenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-11	Acenaphthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Acenaphthylene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Benzo[a]anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Benzo[a]pyrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Benzo[b]fluoranthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Benzo[g,h,i]perylene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Benzo[k]fluoranthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	benz-2-Chloroethoxy toluene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	benz-2-Chloroethyl ether	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	benz-2-Ethylhexylphthalate	ug/L	U	U	U	10	U	U	U	10	7.0	U	U	10	U	U	U	10	10
MW-11	Butylbenzylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Carbazole	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Chrysene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Di-n-butylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Di-n-octylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Dibenz[a,h]anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Dibenzofuran	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Dichthylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Dimethylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Fluoranthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Fluorene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Hexachlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Hexachlorobutadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Indeno[1,2,3-cd]pyrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Isophthalic	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	N-Nitro-di-n-propylamine	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	N-Nitrosodipropylamine	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Naphthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Naphthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Phenanthrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Phenanthrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-11	Phenol	ug/L	U	U	U	10	7.0	U	U	10	5.0	U	U	10	U	U	U	23	23
MW-11	Pyrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-12	1,2,4-Trichlorobenzene	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	1,2-Dichlorobenzene	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	1,3-Dichlorobenzene	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	1,4-Dichlorobenzene	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2,2'-oxybis(1-Chlorophenyl)	ug/L	120	U	U	NA	140	U	U	20	70	U	U	20	87	U	U	20	140
MW-12	2,4,5-Trichlorophenol	ug/L	U	U	U	50	U	U	U	50	U	U	U	50	U	U	U	50	50
MW-12	2,4,6-Trichlorophenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2,4-Dichlorophenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2,4-Dimethylphenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2,4-Dinitrophenol	ug/L	U	U	U	50	U	U	U	50	U	U	U	50	U	U	U	50	50
MW-12	2,4-Dinitrophenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2,6-Dinitrophenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2-Chlorophenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2-Methylphenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2-Methylphenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	2-Nitrophenol	ug/L	U	U	U	50	U	U	U	50	U	U	U	50	U	U	U	50	50
MW-12	2-Nitrophenol	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	3,3'-Dichlorobenzidine	ug/L	U	U	U	20	U	U	U	20	U	U	U	20	U	U	U	20	20
MW-12	3-Nitroaniline	ug/L	U	U	U	50	U	U	U	50	U	U	U	50	U	U	U	50	50

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit		
MW-12	1,4-Dinitro-2-methylphenol	ug/L			U	50			U	U	50			U	50			U	50	50
MW-12	4-Bromophenyl-phenyl ether	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	4-Chloro-3-methylphenol	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	4-Chloroaniline	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	1-Chlorophenyl-phenyl ether	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	4-Methylphenol	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	4-Nitroaniline	ug/L			U	50			U	U	50			U	50			U	50	50
MW-12	4-Nitrophenol	ug/L			U	50			U	U	50			U	50			U	50	50
MW-12	Acenaphthene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Acenaphthylene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Anthracene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Benzo(a)anthracene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Benzo(a)pyrene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Benzo(b)fluoranthene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Benzo(g,h,i)perylene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Benzo(k)fluoranthene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	bis(2-Chloroethoxy)methane	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	bis(2-Chloroethyl) ether	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	bis(2-Ethylhexyl)phthalate	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Butylbenzylphthalate	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Carbazole	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Chrysene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Di-n-butylphthalate	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Di-n-octylphthalate	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Dibenz(a,h)anthracene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Dibenz(ghi)perylene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Dichlorophthalate	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Dimethylphthalate	ug/L			U	20			U	U	20			U	20	10		U	20	20
MW-12	Fluoranthene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Fluorene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Hexachlorobenzene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Hexachlorobutadiene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Hexachlorocyclopentadiene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Hexachloroethane	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Indeno(1,2,3-cd)pyrene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Isophthene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	N-Nitroso-di-n-propylamine	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	N-Nitrosodiphenylamine	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Naphthalene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Nitrobenzene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Octachlorophenol	ug/L			U	50			U	U	50			U	50			U	50	50
MW-12	Phenanthrene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-12	Phenol	ug/L			U	20	25		U	U	20	70		U	20	24		U	20	25
MW-12	Pyrene	ug/L			U	20			U	U	20			U	20			U	20	20
MW-13	1,2,4-Trichlorobenzene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	1,2-Dichlorobenzene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	1,3-Dichlorobenzene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	1,4-Dichlorobenzene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2,2'-oxybis(1-Chloropropane)	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2,4,5-Trichlorophenol	ug/L			U	25			U	U	25			U	25			U	25	25
MW-13	2,4,6-Trichlorophenol	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2,4-Dichlorophenol	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2,4-Dimethylphenol	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2,4-Dinitrophenol	ug/L			U	25			U	U	25			U	25			U	25	25
MW-13	2,4-Dinitrofluorene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2,6-Dinitrofluorene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2-Chloronaphthalene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2-Chlorophenol	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2-Methylnaphthalene	ug/L			U	10			U	U	10			U	10			U	10	10
MW-13	2-Methylphenol	ug/L			U	10			U	U	10			U	10			U	10	10



Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit		
MW-11	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25	
MW-11	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	3,4-Dichlorobenzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	3-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25	
MW-11	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25	
MW-11	4-Nitrophenyl phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	4-Chloro-3-methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	4-Chlorophenyl phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25	
MW-11	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25	
MW-11	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Benzo(a)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Benzo(a)pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Benzo(b)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Benzo(g,h,i)perylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	Benzo(k)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	benz(2,4,6-trimethyl)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-11	benz(2,4,6-trimethyl)anthracene	ug/L		U	U	10		U	U	10		2.0	J	10		U	U	10	10	
MW-11	benz(2,4,6-trimethyl)anthracene	ug/L		U	U	10		U	U	10			U	17		2.0	J	10	17	
MW-11	Butylphenyl ether	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Carbazole	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Chrysene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Di-n-butylphthalate	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Di-n-octylphthalate	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(a,h)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(a,i)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(a,j)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(b,h)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(b,k)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(f,h)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(g,h,i)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(k,l)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(m,n)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(o,p)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(p,q)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(r,s)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(s,t)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(t,u)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(v,w)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(x,y)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(z,aa)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ab)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ac)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ad)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ah)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ai)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(aj)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ak)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(al)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(am)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(an)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ao)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ap)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(aq)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ar)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(as)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(at)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(au)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(av)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(aw)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ax)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ay)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(az)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(ba)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bb)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bc)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bd)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(be)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bf)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bg)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bh)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bi)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bj)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bk)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bl)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bm)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bn)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bo)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bp)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bq)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(br)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bs)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bt)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bu)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bv)anthracene	ug/L		U	U	10		U	U	10			U	10			U	U	10	10
MW-11	Dibenz(bw)anthracene	ug/L		U	U	10		U	U	10			U	10</						

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-14	2-Chloronaphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	2-Chlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	2-Methylthiophthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-14	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	3,3'-Dichlorobenzidine	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	3-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-14	4,6-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-14	4-Bromophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	4-Chloro-1-methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	4-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-14	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-14	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Ambroxene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Benzo(a)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Benzo(a)pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Benzo(b)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Benzo(g,h,i)perylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Benzo(k)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	bis(2-Chloroethoxy)methane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	bis(2-Chloroethyl) ether	ug/L	12			NA		U	U	10		U	U	10		U	U	10	12
MW-14	bis(2-Ethylhexyl)phthalate	ug/L		J	U	10		U	U	10		U	U	11	10	J	J	10	11
MW-14	Butylbutylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Carbazole	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-14	Chrysene	ug/L		U	U	10													

## Appendix C

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**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	
MW-18	2,2-dimethyl-1-Chloropropane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2,4-Dimethylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	2,4-Dinitrofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2,6-Dinitrofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Chloronaphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Chlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Methylnaphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	3,3'-Dichlorodiphenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	3-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	4-n-Dimethyl-2-methylphenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	4-Bromophenyl phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	4-Chloro-3-methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	4-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	4-Chlorophenyl phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-18	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Benzo(a)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Benzo(a)pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Benzo(b)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Benzo(g,h,i)perylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Benzo(k)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	bis(2-Chloroethyl) methane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	bis(2-Chloroethyl) ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	bis(2-Ethylhexyl)phthalate	ug/L		J	U	10		U	U	10		U	U	15		U	U	10	15
MW-18	Butylbenzylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Carbazole	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Chrysene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dn-n-butylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dn-n-octylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenz(a,h)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenz(a,h)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenz(b,h)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenz(k)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Dibenzofluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	D																		

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-19	1,2,4-Trichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2,2'-methyl-1,4-bis(methylene)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-19	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-19	2,6-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2,6-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Methylaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Methylaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-19	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	3,3'-Dichlorodiphenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	3,3'-Dichlorodiphenyl ether	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-19	4-Bromodiphenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	4-Chloro-3-methoxyphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	4-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	4-Chlorodiphenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	4-Methoxyphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-19	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-19	Acetophenone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Acetophenone	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Aniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Benzonitrile	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit		
MW-19	o-methylphenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25	
MW-19	Phenanthrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-19	Phenol	ug/L		U	U	10	20			10		J	U	10	71		U	U	10	71
MW-19	Pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10	
MW-22	1,2,4-Trichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2,2'-oxybis(1-Chloropropane)	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2,4-Dimethylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	2,4-Dinitrobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2,6-Dinitrobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2-Chloronaphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2-Chlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2-Methylnaphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	3,3'-Dichlorobenzidine	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	3-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	4,6-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	4-Bromophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	4-Chloro-3-methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	4-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	200	200	
MW-22	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Anthracene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Benzo(a)anthracene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Benzo(a)pyrene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Benzo(b)fluoranthene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Benzo(g,h,i)perylene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Benzo(k)fluoranthene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	benz(2-Chloroethyl) ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	benz(2-Chloroethyl) ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	benz(2-Ethylhexyl)phthalate	ug/L	48			NA		U	U	10	14	J		20		U	U	20	20	
MW-22	Butylbenzylphthalate	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Carbazole	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Chrysene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Di-n-butylphthalate	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Di-n-octylphthalate	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Dibenz(a,h)anthracene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Diethylphthalate	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Dimethylphthalate	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Fluoranthene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Hexachlorobutadiene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Hexachlorocyclopentadiene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Hexachlorothane	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Indene(1,2,3-c)pyrene	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	
MW-22	Isophthalic	ug/L		U	U	10		U	U	10		U	U	20		U	U	20	20	

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	
MW-22	N-Nitrosodiphenylamine	ug/L	U	U	U	10	U	U	10	U	U	20	U	U	20	U	U	20	20
MW-22	N-Nitrosodiphenylamine	ug/L	U	U	U	10	U	U	10	U	U	20	U	U	20	U	U	20	20
MW-22	Naphthalene	ug/L	U	U	U	10	U	U	10	U	U	20	U	U	20	U	U	20	20
MW-22	Naphthalene	ug/L	U	U	U	10	U	U	10	U	U	20	U	U	20	U	U	20	20
MW-22	Phenanthrene	ug/L	U	U	U	25	U	U	25	U	U	50	U	U	50	U	U	200	200
MW-22	Phenanthrene	ug/L	U	U	U	10	U	U	10	U	U	20	U	U	20	U	U	20	20
MW-22	Phenol	ug/L	U	U	U	10	1.0	1	10	100	10	20	330	330	330	330	330	330	330
MW-22	Pyrene	ug/L	U	U	U	10	U	U	10	U	U	20	U	U	20	U	U	20	20
MW-23	1,2,4-Trichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	1,2-Dichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	1,3-Dichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	1,4-Dichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2,2'-oxybis[1-(4-chlorophenyl)]	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2,4,5-Trichlorophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	2,4,6-Trichlorophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2,4-Dichlorophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2,4-Dimethylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2,4-Dimethylphenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2,6-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2-Chlorophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2-Chlorophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	2-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Nitroaniline	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-23	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3-Methylphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-23	3																		

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-23	Hexachlorocyclopentadiene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Hexachloroethane	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Indeno[1,2,3-cd]pyrene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Isofloranthene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	N-Nitrosodipropylamine	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	N-Nitrosodiphenylamine	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Naphthalene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Nitrobenzene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Pentafluorophenol	ug/L		U	U	25		U	U	25			U	25		U	U	25	25
MW-23	Phenanthrene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Phenol	ug/L		U	U	10	ND				ND	J	NA		U	U	10	10	
MW-23	Pyrene	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-24	1,2,4-Trichlorobenzene	ug/L		U		10		U	U	10		U	U	10		U	U	10	10
MW-24	1,2-Dichlorobenzene	ug/L		U		10		U	U	10		U	U	10		U	U	10	10
MW-24	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2,2'-oxybis(1-Chloropropane)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2,4,6-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2,4-Dimethylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	2,4-Dinitrotoluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2,6-Dinitrotoluene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Chloronaphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Chlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Methylnaphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	3,3'-Dichlorobenzidine	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	3-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	4,6-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	4-Bromophenyl-phenylether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	4-Chloro-3-methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	4-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-24	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Ambroxide	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Benzo[a]anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Benzo[a]pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Benzo[b]fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Benzo[g,h,i]perylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Benzo[k]fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	bed2-Chloromethylaniline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	bed2-Chloromethyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	bed2-Ethylthiophthalate	ug/L		U	U	10		U	U	10	4.0	J		10		J	U	10	10
MW-24	Butylphenylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Carbazole	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Chrysene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Di-n-butylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Di-n-octylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-24	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10



**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	DQ	Detected Limit	Result	LQ	DQ	Detected Limit	Result	LQ	DQ	Detected Limit	Result	LQ	DQ	Detected Limit		
MW-24	Fluoranthene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Phenylene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Hexachlorobenzene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Hexachlorocyclopentadiene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Hexachlorocyclopentadiene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Hexachlorocyclopentadiene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Indeno(1,2,3-cd)pyrene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Isoquinoline	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	N-Nonyl-n-propylamine	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	N-Nonylnaphthalenylamine	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Naphthalene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Naphthalene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Naphthalene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Pentafluorophenol	ug/L	U	U	25			25			U	U	25			U	U	25		25
MW-24	Phenanthrene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-24	Phenol	ug/L	U	U	10			10			2.0	J	J	10			U		15	16
MW-24	Pyrene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	1,2,4-Trichlorobenzene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-28	1,2-Dichlorobenzene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-28	1,3-Dichlorobenzene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-28	1,4-Dichlorobenzene	ug/L	U	U	U	10			10			U	U	10			U	U	10	10
MW-28	2,2'-methyl-4-chloropyrene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2,4,5-Trichlorophenol	ug/L	U	U	25			25				U	U	25			U	U	25	25
MW-28	2,4,6-Trichlorophenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2,4-Dichlorophenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2,4-Dimethoxyphenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2,4-Dinitrophenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2,4-Dinitrophenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2,4-Dinitrophenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2-Methoxyphenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2-Methylphenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	2-Nonylaniline	ug/L	U	U	25			25				U	U	25			U	U	25	25
MW-28	2-Nonylphenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	3,3'-Dichlorobenzidine	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	3-Nonylaniline	ug/L	U	U	25			25				U	U	25			U	U	25	25
MW-28	4,6-Dinitro-2-methylphenol	ug/L	U	U	25			25				U	U	25			U	U	25	25
MW-28	4-Bromophenyl-phenyl ether	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	4,4'-Dinitro-3-methylphenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	4,4'-Dinitroaniline	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	4-Chlorophenyl-phenyl ether	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	4-Methylphenol	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	4-Nonylaniline	ug/L	U	U	25			25				U	U	25			U	U	25	25
MW-28	4-Nonylphenol	ug/L	U	U	25			25				U	U	25			U	U	25	25
MW-28	Acenaphthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Acenaphthylene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Anthracene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10			U	U	10	10
MW-28	Benzofluoranthene	ug/L	U	U	10			10				U	U	10						

**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-28	Dibenzofuran	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Dibenzofuran	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Dichthylphthalate	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Dichthylphthalate	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Fluoranthene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Fluoranthene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Hexachlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Hexachlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Indeno[1,2,3-cd]pyrene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Isoquinoline	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	N-Nitroso-dimethylamine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	N-Nitrosodiphenylamine	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Naphthalene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Nitrobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Pentachlorophenol	ug/L	U	U	25	25	U	U	25	U	U	25	U	U	25	25			
MW-28	Phenanthrene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-28	Phenol	ug/L	U	U	U	10	75	U	1	69	U	10	37	J	10	75			
MW-28	Pyrene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	1,2,4-Trichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	1,2-Dichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	1,3-Dichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	1,4-Dichlorobenzene	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,2'-oxybis(1-Chloropropane)	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4,5-Trichlorophenol	ug/L	U	U	25	25	U	U	25	U	U	25	U	U	25	25			
MW-29	2,4,6-Trichlorophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dichlorophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
MW-29	2,4-Dinitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	10			
M																			

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-29	Carbazole	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Chrysene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Di-n-butylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Di-n-octylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Dibenz(a,h)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Dibenzophthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Dioctylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Ethionanthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Ethylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Hexachlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Hexachlorobiphenyl	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Hexachlorocyclopentadiene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Hexachlorothane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Indenol 1,2,3,4-diphenyl	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Isoquinoline	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	N-Nitrosodimethylamine	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	N-Nitrosodiphenylamine	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Naphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Nitrobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Phenanthroline	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-29	Phenanthrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-29	Phenol	ug/L		U	U	10	10		J	10	12		U	U	10	41		U	43
MW-29	Pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	1,2,4-Trichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,2'-oxybis(4-chlorophenyl)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,4-Dinitrophenol	ug/L		U	U	10		U	U	25		U	U	25		U	U	25	25
MW-30	2,4-Dinitrochlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,6-Dinitrochlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,6-Dinitrochlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2,6-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2-Methylphenanthrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	2-Nitroanthracene	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	3,3'-Dichlorodichlorobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	3-Nitroanthracene	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	4-Nitroanthracene	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	4-Bromophenyl-phenylether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	4-Chloro-1-methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	4-Chloroanthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	4-Nitroanthracene	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	Acenaphthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Anthracene	ug/L	(N)	J		10		U	U	10		U	U	10		U	U	10	10
MW-30	Benz(a)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Benz(a)pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Benz(b)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Benz(g,h,i)perylene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Benz(k)fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	
MW-30	bis(2-Chloroethoxy)ethane	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	bis(2-Chloroethyl) ether	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	bis(2-Ethylhexyl)phthalate	ug/L	NA			10	20	J	UJ	10		J	UJ	10	50	J	U	NA	6K
MW-30	Butylbenzylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Cabazole	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Caryene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Di-n-butylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Di-n-octylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Dibenz(a,h)anthracene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Dibenzofuran	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Dichthylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Dioctylphthalate	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Fluoranthene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Fluorene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Hexasubstobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Hexasubstobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Hexasubstobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Hexasubstobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Indeno[1,2,3-cd]pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Isoptrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	N-Nitroso-di-n-propylamine	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	N-Nitrosodiphenylamine	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Naphthalene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Nitrobenzene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Pentachlorophenol	ug/L		U	U	25		U	U	25		U	U	25		U	U	25	25
MW-30	Phenanthrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-30	Phenol	ug/L		U	U	10	21			10	40			10	17			NA	40
MW-30	Pyrene	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-31	1,2,4-Trichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,2'-oxybis(1-Chloroethanol)	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,4,5-Trichlorophenol	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-31	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,4-Dichlorophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,4-Dinitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,4-Dinitrophenol	ug/L		U	U	10		U	U	50		U	U	25		U	U	50	50
MW-31	2,4-Dinitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,4-Dinitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2,4-Dinitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2-Chloronaphthalene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2-Chlorophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2-Methylnaphthalene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2-Methylphenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	2-Nitroanisole	ug/L		U	U	25		U	U	50		U	U	25		U	UJ	50	50
MW-31	2-Nitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	1,3'-Dichlorobenzidine	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	1-Nitroanisole	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-31	4-n-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-31	4-Bromophenyl-phenylether	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	4-Chloro-1-trichthylphenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	4-Chloroanisole	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	4-Methylphenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	4-Nitroanisole	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-31	4-Nitrophenol	ug/L		U	U	25		U	U	50		U	U	25		U	UJ	50	50
MW-31	Acenaphthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	Acenaphthylene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	Anthracene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-31	Benzo(a)anthracene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

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**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	1Q	DQ	Detect Limit	Result	1Q	DQ	Detect Limit	Result	1Q	DQ	Detect Limit	Result	1Q	DQ	Detect Limit	
MW-12	Acenaphthene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Acenaphthylene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Anthracene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Benzo(a)anthracene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Benzo(a)pyrene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Benzo(b)fluoranthene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Benzo(g,h,i)perylene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Benzo(k)fluoranthene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	bis(2-Cl)dimethoxy methane	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	bis(2-Cl)dimethyl ether	ug/L			U	10		U	U	10		U	U	10	20	J		20	20
MW-12	bis(2-Ethylhexyl)phthalate	ug/L	11			NA		U	U	10		U	U	10	10	J		20	11
MW-12	Butylbenzylphthalate	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Carbazole	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Chrysene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Di-n-butylphthalate	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Di-n-octylphthalate	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Dibenz(a,h)anthracene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Dibenzofuran	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Dichthylphthalate	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Dimethylphthalate	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Fluoranthene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Hepta,fluorobenzene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Hepta,fluorobutadiene	ug/L			U	10		U	U	10		U	U	10		U	UJ	20	20
MW-12	Hepta,fluorocyclopentadiene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Hepta,fluorothane	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Indeno(1,2,3-cd)pyrene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Isophthene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	N-Nitroso-di-n-propylamine	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	N-Nitrosodiphenylamine	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Naphthalene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Nitrobenzene	ug/L			U	10		U	U	10		U	U	10		U	UJ	20	20
MW-12	Pentafluorophenol	ug/L			U	25		U	U	25		U	U	25		U	U	50	50
MW-12	Phenanthrene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-12	Phenol	ug/L			U	10	75			10	12		J	10	110			20	110
MW-12	Pyrene	ug/L			U	10		U	U	10		U	U	10		U	U	20	20
MW-11	1,2,4-Tris,fluorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	1,2-Dichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	1,3-Dichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	1,4-Dichlorobenzene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2,2'-oxybis(1-Chloropropane)	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2,3,5-Tris,fluorophenol	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-11	2,4,6-Tris,fluorophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2,4-Dichlorophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2,4-Dimethylphenol	ug/L		U	U	10		U	UJ	50		U	U	25		U	U	50	50
MW-11	2,4-Dinitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2,6-Dinitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2-Chloronaphthalene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2-Chlorophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2-Methylnaphthalene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2-Methylphenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	2-Nitroanisole	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-11	2-Nitrophenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	3,3',5-Tris,fluorobenzidine	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	3-Nitroanisole	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-11	3,6-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	50		U	U	25		U	U	50	50
MW-11	3-Bromophenyl-phenylether	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	4-Chloro-3-methylphenol	ug/L		U		10		U	U	20		U	U	10		U	U	20	20
MW-11	4-Chloroanisole	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20

**Appendix C**  
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**American Chemical Services NPL Site**  
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Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Default Limit	Result	LQ	DQ	Default Limit	Result	LQ	DQ	Default Limit	Result	LQ	DQ	Default Limit	
MW-11	3-Chlorophenyl phenyl ether	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	3-Methylphenol	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	4-Nitroaniline	ug/L		U	U	25		U	U	30		U	U	25		U	U	30	30
MW-11	4-Nitrophenol	ug/L		U	U	25		U	U	30		U	U	25		U	U	30	30
MW-11	Acenaphthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Acenaphthylene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Anthracene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(a)anthracene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(a)pyrene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(b)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(g,h,i)perylene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(k)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(l)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(e)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(f)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(i)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(j)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(k)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(l)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(m)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(n)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(o)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(p)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(q)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(r)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(s)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(t)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(u)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(v)fluoranthene	ug/L		U	U	10		U	U	20		U	U	10		U	U	20	20
MW-11	Benzo(w)fluoranthene	ug/L		U	U														

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	
MW-14	4-n-Dimethyl-2-methylphenol	ug/L	U	U		25	U	U		25	U	U		25	U	U		200	200
MW-14	4-Bromophenyl-phenylether	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	4-Chloro-3-methylphenol	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	4-Chloroaniline	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	4-Chlorophenyl-phenyl ether	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	4-Methylphenol	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	4-Nitroaniline	ug/L	U	U		25	U	U		25	U	U		25	U	U		200	200
MW-14	4-Nitrophenol	ug/L	U	U		25	U	U		25	U	U		25	U	U		200	200
MW-14	Acenaphthene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Acenaphthylene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Anthracene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Benzo(a)anthracene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Benzo(a)pyrene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Benzo(b)fluoranthene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Benzo(g,h,i)perylene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Benzo(k)fluoranthene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	bis(2,4-chlorophenyl) methane	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	bis(2,4-chlorophenyl) ether	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	bis(2-ethylhexyl)phthalate	ug/L	U	U		10	5.0	U		10	U	U		14	U	U		10	10
MW-14	Butylbenzylphthalate	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Carbazole	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Chrysene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Dibenzophthalate	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Dibenzofluoranthene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Dibenzotetraene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Dichlorophthalate	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Dimethylphthalate	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Fluoranthene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Fluorene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Hexachlorobenzene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Hexachlorobutadiene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Hexachlorocyclopentadiene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Hexachloroethane	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Indeno(1,2,3-cd)pyrene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Isophthalic	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	N-Nitroso-di-n-propylamine	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	N-Nitrosodiphenylamine	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Naphthalene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Nitrobenzene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Octachlorophenol	ug/L	U	U		25	U	U		25	U	U		25	U	U		200	200
MW-14	Phenanthrene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-14	Phenol	ug/L	U	U		10	U	U		10	33	U	U		10	340	U	10	10
MW-14	Pyrene	ug/L	U	U		10	U	U		10	U	U		10	U	U		10	10
MW-16	1,2,4-Trichlorobenzene	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	1,2-Dichlorobenzene	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	1,3-Dichlorobenzene	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	1,4-Dichlorobenzene	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2,2'-oxybis(1-chloropropane)	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2,4,5-Trichlorophenol	ug/L	U	U		25	U	U		75	U	U		50	U	U		75	75
MW-16	2,4,6-Trichlorophenol	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2,4-Dichlorophenol	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2,4-Dimethylphenol	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2,4-Dinitrophenol	ug/L	U	U		10	U	U		75	U	U		50	U	U		75	75
MW-16	2,6-Dinitrophenol	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2-Chloronaphthalene	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2-Chlorophenol	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2-Methylisophthalene	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10
MW-16	2-Methylphenol	ug/L	U	U		10	U	U		10	U	U		20	U	U		10	10



**Appendix C**  
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**American Chemical Services NPL Site**  
**Griffith, Indiana**

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**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-17	2-Chloroanaphthalene	ug/L	U			10	U	U	10	U			10				10	10	
MW-17	2-Chlorophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	2-Methylanaphthalene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	2-Methylphenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	2-Nitroaniline	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-17	2-Nitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	3,3'-Dichlorobenzidine	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	3-Nitroaniline	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-17	4-N-Dimethyl-2-methylphenol	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-17	4-Bromophenyl-phenyl ether	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	4-Chloro-4-methylphenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	4-Chloroaniline	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	4-Chlorophenyl-phenyl ether	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	4-Methylphenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	4-Nitroaniline	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-17	4-Nitrophenol	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-17	Acenaphthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Acenaphthylene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Benzo[a]anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Benzo[a]pyrene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Benzo[b]fluoranthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Benzo[g,h,i]perylene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Benzo[k]fluoranthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	bis(2-Chloroethyl) methane	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	bis(2-Chloroethyl) ether	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	bis(2-Ethylhexyl)phthalate	ug/L	U			10	U	U	10	14			10	U	U	10	14	14	
MW-17	Butylbenzylphthalate	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Carbazole	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-17	Chrysene	ug/L	U			10	U	U	10	U	U	10	U	U</					

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	
MW-38	2,4-Dinitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2,4-Dinitrophenol	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-38	2,4-Dinitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2,6-Dinitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2-Chloro-4-nitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2-Chloro-6-nitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2-Methyl-4-nitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2-Methyl-6-nitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	2-Nitroaniline	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-38	2-Nitrophenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	3,3'-Dichlorodiphenylmethane	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	3-Nitroaniline	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-38	4-m-Dinitro-2-methylphenol	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-38	4-Bromophenyl phenyl ether	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	4-Chloro-2-methylphenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	4-Chloroaniline	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	4-Chlorophenyl phenyl ether	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	4-Methylphenol	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	4-Nitroaniline	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-38	4-Nitrophenol	ug/L	U			25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-38	Acenaphthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Acenaphthylene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Benzo(a)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Benzo(a)pyrene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Benzo(b)fluoranthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Benzo(g,h,i)perylene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-38	Benzo(k)fluoranthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	
MW-19	2,3'-oxybis(1-chloropropene)	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2,4,6-Trichlorophenol	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	2,4,6-Trichlorophenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2,4-Dichlorophenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2,4-Dimethylphenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2,4-Dinitrophenol	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	2,4-Dinitrophenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2,6-Dinitrophenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2-Chloronaphthalene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2-Chlorophenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2-Methylnaphthalene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	2-Methylphenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	3-Nitroaniline	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	3-Nitrophenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	3,3'-Dichlorobenzidine	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	3-Nitroaniline	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	4,6-Dinitro-2-methylphenol	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	4-Bromophenyl-phenyl ether	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	4-Chloro-1-methylphenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	4-Chloroaniline	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	4-Chlorophenyl-phenyl ether	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	4-Methylphenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	4-Nitroaniline	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	4-Nitrophenol	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	Acenaphthene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Acenaphthylene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Anthracene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Benzo(a)anthracene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Benzo(a)pyrene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Benzo(b)fluoranthene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Benzo(g,h,i)perylene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Benzo(k)fluoranthene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	hex2-Chloroethoxymethane	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	hex2-Chloroethyl ether	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	hex2-Ethylhexylphthalate	ug/L	4.0	J	NA		U	U	10	1.0	J	U	U	10	10
MW-19	Butylphenylphthalate	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Carbazole	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Chrysene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Di-n-butylphthalate	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Di-n-octylphthalate	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Dibenz(a,h)anthracene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Dibenzofuran	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Diethylphthalate	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Dioctylphthalate	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Fluoranthene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Indene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Hexachlorobenzene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Hexachlorobutadiene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Hexachlorocyclopentadiene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Hexachlorocyclohexane	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Indeno(1,2,3-cd)pyrene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Isophthalic	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	N-Nitroso di-n-propylamine	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	N-Nitrosodiphenylamine	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Naphthalene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Nitrobenzene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Pentachlorophenol	ug/L		U	25		U	U	25		U	U	U	25	25
MW-19	Phenanthrene	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Phenol	ug/L		U	10		U	U	10		U	U	U	10	10
MW-19	Pyrene	ug/L		U	10		U	U	10		U	U	U	10	10

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-40	1,4-Ti-hydrochloric	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	1,3-Di-hydrochloric	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	1,3-Di-hydrochloric	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	1,4-Ti-hydrochloric	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2,2'-oxybis(1-Chlorophenyl)	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2,4,5-Trichlorophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	2,4,6-Tris-hydrochloric	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2,4-Di-hydrochloric	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2,4-Dimethoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2,4-Dimethoxyphenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	2,4-Dimethoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2,6-Dimethoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2-Chloromethoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2-Chloromethoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2-Methoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2-Methoxyphenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	2-Nitrophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	2-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	3,3',4,4'-biphenyl	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	3-Nitrophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	3-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	4-Nitrophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	4-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	4-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	4-Nitrophenol	ug/L	U	U	U	10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-40	4-Nitrophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	4-Nitrophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	4-Nitrophenol	ug/L	U	U	U	25	U	U	25	U	U	25	U	U	25	U	25	25	
MW-40	4-Nitrophenol	ug/L	U	U	U	10													

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	
NW-40	Polychlorophenol	ug/L	U			25			25			25		U			25	25	
NW-40	Phenanthrene	ug/L	U			10			10			10		U	U		10	10	
NW-40	Phenol	ug/L	U			10			10			10		U			15	15	
NW-40	Pyrene	ug/L	U			10			10			10		U	U		10	10	
NW-41	1,2,4-Trichlorobenzene	ug/L	U			10			10			10		U	U		10	10	
NW-41	1,2-Dichlorobenzene	ug/L	U			10			10			10		U	U		10	10	
NW-41	1,3-Dichlorobenzene	ug/L	U			10			10			10		U	U		10	10	
NW-41	1,4-Dichlorobenzene	ug/L	U			10			10			10		U	U		10	10	
NW-41	2,2'-oxybis(1-Chloropropane)	ug/L	U			10			10			10		U	U		10	10	
NW-41	2,4,5-Trichlorophenol	ug/L	U			25			25			25		U	U		25	25	
NW-41	2,4,6-Trichlorophenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2,4-Dichlorophenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2,4-Dimethylphenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2,4-Dinitrophenol	ug/L	U			25			25			25		U	U		25	25	
NW-41	2,4-Dinitrophenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2,6-Dinitrophenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2-Chloronaphthalene	ug/L	U			10			10			10		U	U		10	10	
NW-41	2-Chlorophenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2-Methylnaphthalene	ug/L	U			10			10			10		U	U		10	10	
NW-41	2-Methylphenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	2-Nitroaniline	ug/L	U			25			25			25		U	U		25	25	
NW-41	2-Nitrophenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	3,3'-Dichlorobenzidine	ug/L	U			10			10			10		U	U		10	10	
NW-41	3-Nitroaniline	ug/L	U			25			25			25		U	U		25	25	
NW-41	4,6-Dinitro-2-methylphenol	ug/L	U			25			25			25		U	U		25	25	
NW-41	4-Bromophenyl-phenylether	ug/L	U			10			10			10		U	U		10	10	
NW-41	4-Chloro-4-methylphenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	4-Chloroaniline	ug/L	U			10			10			10		U	U		10	10	
NW-41	4-Chlorophenyl-phenyl ether	ug/L	U			10			10			10		U	U		10	10	
NW-41	4-Methylphenol	ug/L	U			10			10			10		U	U		10	10	
NW-41	4-Nitroaniline	ug/L	U			25			25			25		U	U		25	25	
NW-41	4-Nitrophenol	ug/L	U			25			25			25		U	U		25	25	
NW-41	Acetophenone	ug/L	U			10			10			10		U					

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	
MW-41	N Nitro-o-di-n-propylamine	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-41	N Nitro-n-diphenylamine	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-41	Naphthalene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-41	Nitrobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-41	o-Nitrophenol	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-41	Phenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-41	Phenol	ug/L		U		10	12		U	10		U	10	14		U	10	14	
MW-41	Pyrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	1,2,4-Trichlorobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	1,2-Dichlorobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	1,3-Dichlorobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	1,4-Dichlorobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2,2'-oxy-bis(1-Chlorophenol)	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2,4,5-Trichlorophenol	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	2,4,6-Trichlorophenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2,4-Dichlorophenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2,4-Dimethylphenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2,4-Dimethylphenol	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	2,4-Dinitrochlorobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2,6-Dinitrochlorobenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2-Chloromethylbenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2-Chlorophenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2-Methylmethylbenzene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2-Methylphenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	2-Nitroaniline	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	2-Nitrophenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	3,3'-Di-bis(2-chlorophenyl)propane	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	3-Nitroaniline	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	4-n-Butanol-2-methylphenol	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	4-Bromophenyl-phenylether	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	4-Chloro-3-methylphenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	4-Chloroaniline	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	4-Chlorophenyl-phenylether	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	4-Methylphenol	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	4-Nitroaniline	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	4-Nitrophenol	ug/L		U		25		U	U	25		U	25		U	U	25	25	
MW-42	Acenaphthene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Acenaphthylene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Anthracene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10		U	10		U	U	10	10	
MW-42	Benzotriazophenanthrene	ug/L		U		10		U	U	10	</								

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	Result	LAQ	DQ	Detect Limit	
MW-42	Hexachlorocyclopentadiene	ug/L	U			10	U	U		10		U		10		U	U	10	10
MW-42	Hexachlorocyclohexane	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	Indene 1,2,3-cd-pyrene	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	Isophthalene	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	N-Nitrosodipropylamine	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	N-Nitrosodiphenylamine	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	Naphthalene	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	Nitrobenzene	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	Pentachlorophenol	ug/L	U			25	U	U		25		U	U	25		U	U	25	25
MW-42	Phenanthrene	ug/L	U			10	U	U		10		U	U	10		U	U	10	10
MW-42	Phenol	ug/L	U			10	50	J		10		U		10	41	J		10	41
MW-42	Pyrene	ug/L	U			10	U	U		10		U		10		U	U	10	10
MW-41	1,2,4-Trichlorobenzene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	1,2-Dichlorobenzene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	1,3-Dichlorobenzene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	1,4-Dichlorobenzene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2,2'-oxybis(1-Chlorophenol)	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2,4,6-Trichlorophenol	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	2,4,6-Trichlorophenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2,4-Dichlorophenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2,4-Dimethylphenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2,4-Dimethylphenol	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	2,4-Dinitrophenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2,6-Dinitrophenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2-Chloronaphthalene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2-Chlorophenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2-Methylnaphthalene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2-Methylphenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	2-Nitroaniline	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	2-Nitrophenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	3,3'-Dichlorobenzidine	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	3-Nitroaniline	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	4,6-Dinitro-2-methylphenol	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	4-Bromophenyl phenyl ether	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	4-Chloro-3-methylphenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	4-Chloroaniline	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	4-Chlorophenyl phenyl ether	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	4-Methylphenol	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	4-Nitroaniline	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	4-Nitrophenol	ug/L	U			25	U	U		25		U	U	25		U	U	50	50
MW-41	Acenaphthene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Acenaphthylene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Anthracene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Benzo(a)anthracene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Benzo(a)pyrene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Benzo(b)fluoranthene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Benzo(g,h,i)perylene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Benzo(k)fluoranthene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	bis(2-Chloroethoxy)methane	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	bis(2-Chloroethyl) ether	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	bis(2-Ethylhexyl)phthalate	ug/L	U			10	10	J		10		U		10		U	U	20	20
MW-41	Butylbenzylphthalate	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Carbazole	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Chrysene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Dibutylphthalate	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Dibenzoylphthalate	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Dibenzofluoranthene	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Dibenzofuran	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Dichlorophthalate	ug/L	U			10	U	U		10		U	U	10		U	U	20	20
MW-41	Dimethylphthalate	ug/L	U			10	U	U		10		U	U	10		U	U	20	20



**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

[illegible]

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-44	Dibenz(a,h)anthracene	ug/L	U			10				10				10					10
MW-44	Dibenzofuran	ug/L	U			10				10				10					10
MW-44	Dichlorophthalate	ug/L	U			10				10				10					10
MW-44	Dimethylphthalate	ug/L	U			10				10				10	9.0	J	J	10	10
MW-44	Fluoranthene	ug/L	U			10				10				10					10
MW-44	Fluorene	ug/L	U			10				10				10					10
MW-44	Hexachlorobenzene	ug/L	U			10				10				10					10
MW-44	Hexachlorobiphenyl	ug/L	U			10				10				10					10
MW-44	Hexachlorocyclopentadiene	ug/L	U			10				10				10					10
MW-44	Hexachlorocyclopentadiene	ug/L	U			10				10				10					10
MW-44	Hexachlorocyclopentadiene	ug/L	U			10				10				10					10
MW-44	Indeno(1,2,3-cd)pyrene	ug/L	U			10				10				10					10
MW-44	Isophthalic acid	ug/L	U			10				10				10					10
MW-44	N-Nitrosodipropylamine	ug/L	U			10				10				10					10
MW-44	N-Nitrosodiphenylamine	ug/L	U			10				10				10					10
MW-44	Naphthalene	ug/L	U			10				10				10					10
MW-44	Nitrobenzene	ug/L	U			10				10				10					10
MW-44	Perfluorooctanoic acid	ug/L	U			25				25				25					25
MW-44	Phenanthrene	ug/L	U			10				10				10					10
MW-44	Phenol	ug/L	U			10	3.5			NA				10	11	J	J	10	11
MW-44	Pyrene	ug/L	U			10				10				10					10
MW-45	1,2,4-Trichlorobenzene	ug/L	U			20				20				20					20
MW-45	1,2-Dichlorobenzene	ug/L	U			20	4.0			NA	2.0	J	J	20	5.0	J	J	20	20
MW-45	1,3-Dichlorobenzene	ug/L	U			20				20				20					20
MW-45	1,4-Dichlorobenzene	ug/L	U			20	11			NA				20	1.0	J	J	20	20
MW-45	2,2'-methylenebis(4-chlorophenol)	ug/L	U			20	9.5			NA				20	7.0	J	J	20	20
MW-45	2,4,5-Trichlorophenol	ug/L	U			20				20				20					20
MW-45	2,4,6-Trichlorophenol	ug/L	U			20				20				20					20
MW-45	2,4-Dichlorophenol	ug/L	U			20				20				20					20
MW-45	2,4-Dimethylphenol	ug/L	U			20				20				20					20
MW-45	2,4-Dinitrophenol	ug/L	U			20				20				20					20
MW-45	2,4-Dinitrophenol	ug/L	U			20				20				20					20
MW-45	2,4-Dinitrophenol	ug/L	U			20				20				20					20
MW-45	2,4-Dinitrophenol	ug/L	U			20				20				20					20
MW-45	2-Chloronaphthalene	ug/L	U			20				20				20					20
MW-45	2-Chlorophenol	ug/L	U			20				20				20					20
MW-45	2-Methylnaphthalene	ug/L	4.0	J		NA	5.0			NA	7.0	J	J	20	5.0	J	J	20	20
MW-45	2-Methylphenol	ug/L	U			20				20				20					20
MW-45	2-Nitroaniline	ug/L	U			20				20				20					20
MW-45	2-Nitrophenol	ug/L	U			20				20				20					20
MW-45	3,3'-Dichlorobenzidine	ug/L	U			NA				20				20					20
MW-45	3-Nitroaniline	ug/L	U			20				20				20					20
MW-45	3-Nitrophenol	ug/L	U			20				20				20					20
MW-45	4,6-Dinitro-2-methylphenol	ug/L	U			20				20				20					20
MW-45	4-Bromophenyl phenyl ether	ug/L	U			20				20				20					20
MW-45	4-Chloro-1-methylphenol	ug/L	U			20				20				20					20
MW-45	4-Chloroaniline	ug/L	U			20				20				20					20
MW-45	4-Chlorophenyl phenyl ether	ug/L	U			20				20				20					20
MW-45	4-Methylphenol	ug/L	U			20				20				20					20
MW-45	4-Nitroaniline	ug/L	U			20				20				20					20
MW-45	4-Nitrophenol	ug/L	U			20				20				20					20
MW-45	Acenaphthene	ug/L	U			20				20				20					20
MW-45	Acenaphthylene	ug/L	U			20				20				20					20
MW-45	Anthracene	ug/L	U			20				20				20					20
MW-45	Benzo(a)anthracene	ug/L	U			20				20				20					20
MW-45	Benzo(a)pyrene	ug/L	U			20				20				20					20
MW-45	Benzo(b)fluoranthene	ug/L	U			20				20				20					20
MW-45	Benzo(g,h,i)perylene	ug/L	U			20				20				20					20
MW-45	Benzo(k)fluoranthene	ug/L	U			20				20				20					20
MW-45	benz(2-chloroethyl)urethane	ug/L	U			20				20				20					20
MW-45	benz(2-chloroethyl) ether	ug/L	7.0	J		NA	14			NA	8.0	J	J	20	11	J	J	20	20
MW-45	benz(2-ethylhexyl)phthalate	ug/L	U			20				20				20					20
MW-45	Butylbenzophthalate	ug/L	U			20				20				20					20

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highway
			Result	I/Q	DQ	Detected Limit	Result	I/Q	DQ	Detected Limit	Result	I/Q	DQ	Detected Limit	Result	I/Q	DQ	Detected Limit	Detection
MW-45	Carbazole	ug/L		U		20				20		U	U	20				20	20
MW-45	Chrysene	ug/L		U		20				20		U	U	20				20	20
MW-45	Di-n-butylphthalate	ug/L		U		20				20		U	U	20				20	20
MW-45	Di-n-octylphthalate	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(a,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(a,i)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(b,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(b,k)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(e,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(f,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(g,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(i,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(j,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(k,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(l,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(m,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(n,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(o,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(p,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(q,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(r,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(s,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(t,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(u,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(v,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(w,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(x,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(y,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(z,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(a,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(b,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(c,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(d,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(e,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(f,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(g,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(h,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(i,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(j,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(k,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(l,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(m,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(n,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(o,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(p,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(q,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(r,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(s,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(t,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(u,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(v,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(w,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(x,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(y,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(z,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(a,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(b,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(c,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(d,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(e,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(f,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(g,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(h,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(i,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(j,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(k,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(l,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(m,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(n,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(o,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(p,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(q,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(r,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(s,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(t,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(u,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(v,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(w,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(x,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(y,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(z,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(a,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(b,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(c,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(d,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(e,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(f,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(g,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(h,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(i,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(j,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(k,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(l,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(m,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(n,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(o,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(p,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(q,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(r,h)anthracene	ug/L		U		20				20		U	U	20				20	20
MW-45	Dibenz(s,h)anthracene	ug/L		U		20				20		U	U	20				20	

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-46	bis(2-Chloroethoxy)methane	ug/L	U			10				10				10				10	
MW-46	bis(2-Chloroethyl) ether	ug/L	ND			NA			20				10				50	10	
MW-46	bis(2-Ethylhexyl)phthalate	ug/L	U			10				10				10				10	
MW-46	Butylhexylphthalate	ug/L	U			10				10				10				10	
MW-46	Carbazole	ug/L	U			10				10				10				10	
MW-46	Chrysene	ug/L	U			10				10				10				10	
MW-46	Di-n-butylphthalate	ug/L	U			10				10				10				10	
MW-46	Di-n-octylphthalate	ug/L	U			10				10				10				10	
MW-46	Dibenzocyclopentadiene	ug/L	U			10				10				10				10	
MW-46	Dibenzofuran	ug/L	U			10				10				10				10	
MW-46	Dichthylphthalate	ug/L	U			10				10				10				10	
MW-46	Dimethylphthalate	ug/L	U			10				10				10				10	
MW-46	Fluoranthene	ug/L	U			10				10				10				10	
MW-46	Heptachlorodioxin	ug/L	U			10				10				10				10	
MW-46	Heptachlorobenzene	ug/L	U			10				10				10				10	
MW-46	Heptachlorocyclopentadiene	ug/L	U			10				10				10				10	
MW-46	Heptachloronaphthalene	ug/L	U			10				10				10				10	
MW-46	Indeno[1,2,3-cd]pyrene	ug/L	U			10				10				10				10	
MW-46	Isophthalic acid	ug/L	U			10				10				10				10	
MW-46	N-Nitrosodipropylamine	ug/L	U			10				10				10				10	
MW-46	N-Nitrosodiphenylamine	ug/L	U			10				10				10				10	
MW-46	Naphthalene	ug/L	U			10				10				10				10	
MW-46	Nitrobenzene	ug/L	U			10				10				10				10	
MW-46	Permethrin	ug/L	U			25				25				25				25	
MW-46	Phenanthrene	ug/L	U			10				10				10				10	
MW-46	Phenol	ug/L	U			10				10				10				10	
MW-46	Pyrene	ug/L	U			10				10				10				10	
MW-47	1,2,4-Trichlorobenzene	ug/L	U			10				10				10				10	
MW-47	1,2-Dichlorobenzene	ug/L	U			10				10				10				10	
MW-47	1,3-Dichlorobenzene	ug/L	U			10				10				10				10	
MW-47	1,4-Dichlorobenzene	ug/L	U			10				10				10				10	
MW-47	2,2'-oxybis(1-Chloropropane)	ug/L	U			10				10				10				10	
MW-47	2,4,5-Trichlorophenol	ug/L	U			25				25				25				25	
MW-47	2,4,6-Trichlorophenol	ug/L	U			10				10				10				10	
MW-47	2,4-Dichlorophenol	ug/L	U			10				10									

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	UD	Detect Limit	Result	LQ	UD	Detect Limit	Result	LQ	UD	Detect Limit	Result	LQ	UD	Detect Limit	
MW-47	Benzo(a)pyrene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-47	Benzo(b)fluoranthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-47	Benzo(g,h,i)perylene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-47	Benzo(k)fluoranthene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-47	benz(2-Chloromethyl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-47	benz(2-Chloromethyl) ether	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	10	10	
MW-47	benz(2-Ethylhexyl)phthalate	ug/L	U			10	U	U	10	U	U	10	U	U	10	J	U	3.0	10
MW-47	Butylbenzylphthalate	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Carbazole	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Chrysene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Di-n-butylphthalate	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Di-n-octylphthalate	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(a,h)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(a,i)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(a,j)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(b,h)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(b,k)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(f,h)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(g,h,i)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(h,i)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(k,l)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(m,n)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(o,p)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(p,q)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(r,s)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(t,u)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(v,w)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(x,y)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(z,aa)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ab)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(bc)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(cd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(de)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ef)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(fg)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(gh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(hi)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ik)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(jl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(km)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(lm)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mn)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(no)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(op)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(pq)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(qr)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rs)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(st)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(tv)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ux)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(vy)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(wz)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xy)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(yz)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(abcd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(efgh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ijkl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mnop)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rstuvw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xyzw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(abcd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(efgh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ijkl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mnop)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rstuvw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xyzw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(abcd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(efgh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ijkl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mnop)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rstuvw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xyzw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(abcd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(efgh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ijkl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mnop)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rstuvw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xyzw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(abcd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(efgh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ijkl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mnop)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rstuvw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xyzw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(abcd)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(efgh)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(ijkl)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(mnop)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(rstuvw)anthracene	ug/L	U			10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-47	Dibenz(xyzw)anthracene																		

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	1Q	Detect Limit	Result	1Q	Detect Limit	Result	1Q	Detect Limit	Result	1Q	Detect Limit	
MW-48	Acenaphthene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Acenaphthylene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Anthracene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Benzofluoranthene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Benzo[a]pyrene	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	Benzo[b]fluoranthene	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	Benzo[e]fluoranthene	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	Benzo[k]fluoranthene	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	benz[2,3-b]fluoranthene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	benz[2,4-b]fluoranthene	ug/L	U		20	10		10	18	J	20	U	U	10	20
MW-48	benz[2,6-b]fluoranthene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Butylbenzylphthalate	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Carbazole	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Chrysene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Di-n-butylphthalate	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Di-n-octylphthalate	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	Dibenz[ah]anthracene	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	Dibenzofuran	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Dichlorophthalate	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Dimethylphthalate	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Dinitrophenylphthalate	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Fluoranthene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Fluorene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Hexachlorobenzene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Hexachlorobutadiene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Hexachlorocyclopentadiene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Hexachlorocyclohexane	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Indene[1,2,3-c]pyrene	ug/L	U		20	U	R	10	U	U	20	U	U	10	20
MW-48	Isophthalic acid	ug/L	U		20	10	J	10	U	U	20	U	U	10	20
MW-48	N-Nitrosodiphenylamine	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	N-Nitrosodiphenylamine	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Naphthalene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Nitrobenzene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Octachlorophthalate	ug/L	U		20	U	U	25	U	U	50	U	U	25	50
MW-48	Phenanthrene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-48	Phenol	ug/L	110		NA	28		10	100		20	80	J	J	110
MW-48	Pyrene	ug/L	U		20	U	U	10	U	U	20	U	U	10	20
MW-49	1,2,4-Trichlorobenzene	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	1,2-Dichlorobenzene	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	1,3-Dichlorobenzene	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	1,4-Dichlorobenzene	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,2'-oxybis[4-chlorophenol]	ug/L	U		20	10		10	25		NA	28		NA	28
MW-49	2,4,5-Trichlorophenol	ug/L	U		50	U	U	25	U	U	120	U	U	50	120
MW-49	2,4,6-Trichlorophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,4-Dichlorophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,4-Dinitrophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,4-Dinitrophenol	ug/L	U		50	U	U	25	U	U	120	U	U	50	120
MW-49	2,4-Dinitrophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,4-Dinitrophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,4-Dinitrophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2,4-Dinitrophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2-Chloronaphthalene	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2-Chlorophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2-Methylnaphthalene	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2-Methylphenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	2-Nitroaniline	ug/L	U		50	U	U	25	U	U	120	U	U	50	120
MW-49	2-Nitrophenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	3,3'-Dichlorobenzidine	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	3-Nitroaniline	ug/L	U		50	U	U	25	U	U	120	U	U	50	120
MW-49	4,6-Dinitro-2-methylphenol	ug/L	U		50	U	U	25	U	U	120	U	U	50	120
MW-49	4-Bromophenyl-phenyl ether	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	4-Chloro-1-methylphenol	ug/L	U		20	U	U	10	U	U	50	U	U	20	50
MW-49	4-Chloroaniline	ug/L	U		20	U	U	10	U	U	50	U	U	20	50

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

[illegible]

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	1Q	1Q	Detect Limit	Result	1Q	1Q	Detect Limit	Result	1Q	1Q	Detect Limit	Result	1Q	1Q	Detect Limit	
MW-50	3,6-Dinitro-2-methylphenol	ug/L	U	U	U	25	U	U	U	30	U	U	U	25	U	U	U	150	150
MW-50	4-Bromophenyl-phenylether	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	4-Chloro-3-methylphenol	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	4-Chloroaniline	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	4-Chlorophenyl-phenyl ether	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	4-Methylphenol	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	4-Nitroaniline	ug/L	U	U	U	25	U	U	U	30	U	U	U	25	U	U	U	150	150
MW-50	4-Nitrophenol	ug/L	U	U	U	25	U	U	U	30	U	U	U	25	U	U	U	150	150
MW-50	Acenaphthene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Acenaphthylene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Anthracene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Benzo(a)anthracene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Benzo(a)pyrene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Benzo(b)fluoranthene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Benzo(g,h,i)perylene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Benzo(k)fluoranthene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	best 2-Chloroethoxy methane	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	best 2-Chloroethyl ether	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	best 2-Ethylhexylphthalate	ug/L	U	U	U	10	11	U	U	NA	20	U	U	10	U	U	U	60	60
MW-50	Butylbenzylphthalate	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Carbazole	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Chrysene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Di-n-butylphthalate	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Di-n-octylphthalate	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Dibenz(a,h)anthracene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Dibenzofuran	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Dichlorylphthalate	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Dimethylphthalate	ug/L	U	U	U	10	90	U	U	NA	U	U	U	10	U	U	U	60	60
MW-50	Fluoranthene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Fluorene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Hexachlorobenzene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Hexachlorobutadiene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Hexachlorothiane	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Indeno(1,2,3-cd)pyrene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Isophthalic	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	N-Nitroso-di-n-propylamine	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	N-Nitrosodipropylamine	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Naphthalene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Nitrobenzene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Octachlorophenol	ug/L	U	U	U	25	U	U	U	30	U	U	U	25	U	U	U	150	150
MW-50	Phenanthrene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-50	Phenol	ug/L	U	U	U	10	100	U	U	NA	10	U	U	10	140	U	U	NA	140
MW-50	Pyrene	ug/L	U	U	U	10	U	U	U	15	U	U	U	10	U	U	U	60	60
MW-51	1,2,3-Trichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	1,2-Dichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	1,3-Dichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	1,4-Dichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2,2'-oxybis(1-Chloropropane)	ug/L	6.5	U	U	NA	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2,4,5-Trichlorophenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-51	2,4,6-Trichlorophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2,4-Dichlorophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2,4-Dimethylphenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2,4-Dinitrophenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-51	2,4-Dinitrotoluene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2,6-Dinitrotoluene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2-Chloronaphthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2-Chlorophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2-Methylnaphthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-51	2-Methylphenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10



**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

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**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-52	2-Chloronaphthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2-Chlorophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2-Methylisophthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2-Methylphenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2-Nitroaniline	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	2-Nitrophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	3,3'-Dichlorobenzidine	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	3-Nitroaniline	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	4,6-Dinitro-2-methylphenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	4-Bromophenyl-phenyl ether	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	4-Chloro-3-methylphenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	4-Chloroaniline	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	4-Chlorophenyl-phenyl ether	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	4-Methylphenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	4-Nitroaniline	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	4-Nitrophenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	Acenaphthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Acenaphthylene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Benzo(a)anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Benzo(a)pyrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Benzo(b)fluoranthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Benzo(g,h,i)perylene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Benzo(k)fluoranthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	benz(2,3-bisoxazolonyl)anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	benz(2,4-bisoxazolonyl) ether	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	benz(2,6-dioxythiophenyl)phthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Butyltin triisobutylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Carbazole	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Chrysene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Di-n-butylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Di-n-octylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Dibenz(a,h)anthracene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Dibenzofuran	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Dichlorophthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Dimethylphthalate	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Fluoranthene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Fluorene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Hexachlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Hexachlorobutadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Hexachlorocyclopentadiene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Indeno(1,2,3-cd)pyrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Isophthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	N-Nitroso-di-n-propylamine	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	N-Nitroso-diphenylamine	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Naphthalene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Nitrobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Octachlorophenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	Phenanthrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Phenol	ug/L	30	U	U	NA	24	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	Pyrene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	1,2,4-Trichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	1,2-Dichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	1,3-Dichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	1,4-Dichlorobenzene	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2,2'-oxybis(1-Chloropropane)	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2,4,5-Trichlorophenol	ug/L	U	U	U	25	U	U	U	25	U	U	U	25	U	U	U	25	25
MW-52	2,4,6-Trichlorophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10
MW-52	2,4-Dichlorophenol	ug/L	U	U	U	10	U	U	U	10	U	U	U	10	U	U	U	10	10

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

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**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	IAQ	DQ	Detect Limit	Result	IAQ	DQ	Detect Limit	Result	IAQ	DQ	Detect Limit	Result	IAQ	DQ	Detect Limit	
MW-54	2,2'-oxybis(1-Chloropropane)	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2,4,6-Trichlorophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	2,4,6-Trichlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2,4-Dichlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2,4-Dimethylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2,4-Dinitrophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	2,4-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2,6-Dinitrophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2-Chloronaphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2-Chlorophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2-Methylnaphthalene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2-Methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	2-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	2-Nitrophenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	1,3'-Dichlorobenzene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	3-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	4-n-Dinitro-2-methylphenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	4-Bromophenyl-phenylether	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	4-Chloro-1-methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	4-Chloroaniline	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	4-Chlorophenyl-phenyl ether	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	4-Methylphenol	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	4-Nitroaniline	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	4-Nitrophenol	ug/L		U	U	25		U	U	25		U	U	50		U	U	75	75
MW-54	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	Acenaphthylene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	Anthracene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	Benzo(a)anthracene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	Benzo(a)pyrene	ug/L		U	U	10		U	U	10		U	U	20		U	U	30	30
MW-54	Benzo(b)fluoranthene	ug/L		U															

**Appendix C**  
**Maximum Concentration of Semivolatile Organics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	Result	LQ	UQ	Detect Limit	
MW-55	1,2,4-Trichlorobenzene	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	1,2-Dichlorobenzene	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	1,3-Dichlorobenzene	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	1,4-Dichlorobenzene	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2,2'-oxybis(1-Chloroethane)	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2,4,5-Trichlorophenol	ug/L			U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-55	2,4,6-Trichlorophenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2,4-Dichlorophenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2,4-Dimethylphenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2,6-Dimethylphenol	ug/L			U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-55	2,6-Dimethoxybenzene	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2,6-Dimethoxybenzene	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2-Chloro-3-methylphenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2-Chlorophenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2-Methylphenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	2-Methylphenol	ug/L			U	10	2.0	J	J	10	U	U	10	U	U	10	U	U	10
MW-55	2-Nitroaniline	ug/L			U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-55	2-Nitrophenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	3,3'-Dichlorodiphenyl ether	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	3-Nitroaniline	ug/L			U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-55	3,4-Dimethoxy-2-methylphenol	ug/L			U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-55	4-Bromodiphenyl ether	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	4-Chloro-3-methylphenol	ug/L			U	10	4.0	J	J	10	U	U	10	U	U	10	U	U	10
MW-55	4-Chloroaniline	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	4-Chlorodiphenyl ether	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	4-Methylphenol	ug/L			U	10	U	U	10	U	U	10	U	U	10	U	U	10	10
MW-55	4-Nitroaniline	ug/L			U	25	U	U	25	U	U	25	U	U	25	U	U	25	25
MW-55	4-Nitrophenol	ug/L			U	25	19	J	J	25	U	U	25	U	U	25	U		

Appendix C  
Maximum Concentration of Semivolatile Organics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	LQ	Detect Limit	Result	LQ	Detect Limit	Result	LQ	Detect Limit	Result	LQ	Detect Limit	
MW-55	Pentachlorophenol	ug/L		U	25		U	25		U	25		U	25	25
MW-55	Phenanthrene	ug/L		U	10		U	10		U	10		U	10	10
MW-55	Phenol	ug/L		U	10	39	J	10		U	10	70	J	10	39
MW-55	Pyrene	ug/L		U	10		U	10		U	10		U	10	10

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-1S	4,4'-DDD	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	4,4'-DDT	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	4,4'-DDT	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Aldrin	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	alpha-BHC	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	alpha-Chlordane	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Anchor-1016	ug/L	NA				U	U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1221	ug/L	NA				U	U	U	2.0		U	U	2.0		U	U	2.0	2.0
M-1S	Anchor-1232	ug/L	NA				U	U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1242	ug/L	NA				U	U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1248	ug/L	NA				U	U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1254	ug/L	NA				U	U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1260	ug/L	NA				U	U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Beta-BHC	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	delta-BHC	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Dieldrin	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endosulfan I	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Endosulfan II	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endosulfan sulfate	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endrin	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endrin aldehyde	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endrin ketone	ug/L	NA				U	U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	gamma-BHC	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	gamma-Chlordane	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Heptachlor	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Heptachlor epoxide	ug/L	NA				U	U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Methoxychlor	ug/L	NA				0.08	JP	J	0.003		U	U	0.50		U	U	0.50	0.50
M-1S	Toxaphene	ug/L	NA				U	U	U	5.0		U	U	5.0		U	U	5.0	5.0
M-1S	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	4,4'-DDT	ug/L	NA				0.01	JP	J	0.001		U	U	0.10		U	U	0.10	0.10
M-1S	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Anchor-1016	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1221	ug/L	NA					U	U	2.0		U	U	2.0		U	U	2.0	2.0
M-1S	Anchor-1232	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1242	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1248	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1254	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Anchor-1260	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
M-1S	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
M-1S	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NFL Site**  
**Griffith, Indiana**

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Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit		
M-4S	Methoxychlor	ug/L	NA				U	U	0.50		U	U	0.50		U	U	0.50		0.50	
M-4S	Toxaphene	ug/L	NA				U	U	5.0		U	U	5.0		U	U	5.0		5.0	
MW-06	4,4'-DDD	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-06	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0		2.0
MW-06	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-06	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-06	Anchor-1246	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-06	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-06	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-06	beta-BHC	ug/L		U	U	0.05	0.05	P	J	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-06	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	gamma-Chlordane	ug/L		U	U	0.05	0.05	J	J	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-06	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50		0.50
MW-06	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0		5.0
MW-07	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	Anchor-1016	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-07	Anchor-1221	ug/L	NA					U	U	2.0		U	U	2.0		U	U	2.0		2.0
MW-07	Anchor-1242	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-07	Anchor-1246	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-07	Anchor-1254	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-07	Anchor-1260	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-07	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-07	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-07	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05		0.05

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	
MW-07	Heptachlor epoxide	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-07	Methoxychlor	ug/L	NA				U	U	0.50		U	U	0.50		0.50
MW-07	Toxaphene	ug/L	NA				U	U	5.0		U	U	5.0		5.0
MW-08	4,4'-DDD	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	4,4'-DDT	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	4,4'-DDT	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	Aldrin	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	alpha-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	alpha-Chlordane	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	Anchor-1016	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-08	Anchor-1221	ug/L		U	U	2.0	U	U	2.0		U	U	2.0		2.0
MW-08	Anchor-1232	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-08	Anchor-1242	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-08	Anchor-1248	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-08	Anchor-1254	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-08	Anchor-1260	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-08	beta-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	delta-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	Dieldrin	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	Endosulfan I	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	Endosulfan II	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	Endosulfan sulfate	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	Endrin	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	Endrin aldehyde	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	Endrin ketone	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-08	gamma-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	gamma-Chlordane	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	Heptachlor	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	Heptachlor epoxide	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-08	Methoxychlor	ug/L		U	U	0.50	U	U	0.50		U	U	0.50		0.50
MW-08	Toxaphene	ug/L		U	U	5.0	U	U	5.0		U	U	5.0		5.0
MW-09	4,4'-DDD	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	4,4'-DDE	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	4,4'-DDT	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	Aldrin	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	alpha-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	alpha-Chlordane	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	Anchor-1016	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-09	Anchor-1221	ug/L		U	U	2.0	U	U	2.0		U	U	2.0		2.0
MW-09	Anchor-1232	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-09	Anchor-1242	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-09	Anchor-1248	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-09	Anchor-1254	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-09	Anchor-1260	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		1.0
MW-09	beta-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	delta-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	Dieldrin	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	Endosulfan I	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	Endosulfan II	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	Endosulfan sulfate	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	Endrin	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	Endrin aldehyde	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	Endrin ketone	ug/L		U	U	0.10	U	U	0.10		U	U	0.10		0.10
MW-09	gamma-BHC	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05
MW-09	gamma-Chlordane	ug/L		U	U	0.05	U	U	0.05		U	U	0.05		0.05

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-09	Heptachlor	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-09	Heptachlor epoxide	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-09	Methoxychlor	ug/L	U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50	
MW-09	Toxaphene	ug/L	U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0	
MW-10C	4,4'-DDD	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	4,4'-DDE	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	4,4'-DDT	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	Aldrin	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	alpha-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	alpha-Chlordane	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	Ancho-1016	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-10C	Ancho-1221	ug/L	U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0	
MW-10C	Ancho-1232	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-10C	Ancho-1242	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-10C	Ancho-124H	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-10C	Ancho-1254	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-10C	Ancho-1260	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-10C	beta-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	delta-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	Dieldrin	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	Endosulfan I	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	Endosulfan II	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	Endosulfan sulfate	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	Emtrix	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	Emtrix aldehyde	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	Emtrix ketone	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-10C	gamma-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	gamma-Chlordane	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	Heptachlor	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	Heptachlor epoxide	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-10C	Methoxychlor	ug/L	U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50	
MW-10C	Toxaphene	ug/L	U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0	
MW-11	4,4'-DDD	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	4,4'-DDE	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	4,4'-DDT	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	Aldrin	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-11	alpha-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-11	alpha-Chlordane	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-11	Ancho-1016	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-11	Ancho-1221	ug/L	U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0	
MW-11	Ancho-1232	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-11	Ancho-1242	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-11	Ancho-124H	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-11	Ancho-1254	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-11	Ancho-1260	ug/L	U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0	
MW-11	beta-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-11	delta-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-11	Dieldrin	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	Endosulfan I	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	
MW-11	Endosulfan II	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	Endosulfan sulfate	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	Emtrix	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	Emtrix aldehyde	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	Emtrix ketone	ug/L	U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10	
MW-11	gamma-BHC	ug/L	U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05	

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	
MW-11	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-11	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-11	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-11	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-11	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-12	4,4'-DDD	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	4,4'-DDE	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	4,4'-DDT	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	Aldrin	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	alpha-BHC	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	alpha-Chlordane	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	Anchlor-1016	ug/L			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	Anchlor-1221	ug/L			U	2.0		U	U	2.0		U	U	2.0	2.0
MW-12	Anchlor-1232	ug/L			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	Anchlor-1242	ug/L			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	Anchlor-1248	ug/L			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	Anchlor-1254	ug/L			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	Anchlor-1260	ug/L			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	beta-BHC	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	delta-BHC	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	Dieldrin	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	Endosulfan I	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	Endosulfan II	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	Endosulfan sulfate	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	Endrin	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	Endrin aldehyde	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	Endrin ketone	ug/L			U	0.10		U	U	0.10		U	U	0.10	0.10
MW-12	gamma-BHC	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	gamma-Chlordane	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	Heptachlor	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	Heptachlor epoxide	ug/L			U	0.05		U	U	0.05		U	U	0.05	0.05
MW-12	Methoxychlor	ug/L			U	0.50		U	U	0.50		U	U	0.50	0.50
MW-12	Toxaphene	ug/L			U	5.0		U	U	5.0		U	U	5.0	5.0
MW-13	4,4'-DDD	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	Anchlor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Anchlor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-13	Anchlor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Anchlor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Anchlor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Anchlor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Anchlor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-13	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10	0.10

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	
MW-13	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-13	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-13	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-14	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	4,4'-DDD	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	Ancho-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Ancho-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-14	Ancho-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Ancho-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Ancho-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Ancho-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Ancho-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-14	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-14	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-14	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-15	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	4,4'-DDD	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	Ancho-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Ancho-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-15	Ancho-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Ancho-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Ancho-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Ancho-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Ancho-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	
MW-15	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-15	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-15	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-15	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-18	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-18	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Anchor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-18	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-18	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-18	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-19	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-19	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-19	4,4'-DDT	ug/L		U	U	0.10	0.01	U	U	NA		U	U	0.10		U	U	0.10	0.10
MW-19	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-19	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-19	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-19	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-19	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Anchor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-19	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-19	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-19	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-19	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-19	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-19	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-19	Endrin aldehyde	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-19	Endrin ketone	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-19	gamma-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-19	gamma-Chlordane	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-19	Heptachlor	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-19	Heptachlor epoxide	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-19	Methoxychlor	ug/L	U	U	U	0.50	U	U	U	0.50	U	U	U	0.50	U	U	U	0.50	0.50
MW-19	Toxaphene	ug/L	U	U	U	5.0	U	U	U	5.0	U	U	U	5.0	U	U	U	5.0	5.0
MW-22	4,4'-DDE	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	4,4'-DDD	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	4,4'-DDT	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	Aldrin	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	alpha-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	alpha-Chlordane	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	Ancho-1016	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-22	Ancho-1231	ug/L	U	U	U	2.0	U	U	U	2.0	U	U	U	2.0	U	U	U	2.0	2.0
MW-22	Ancho-1232	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-22	Ancho-1242	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-22	Ancho-1248	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-22	Ancho-1254	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-22	Ancho-1260	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-22	beta-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	delta-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	Dieldrin	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	Endosulfan I	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	Endosulfan II	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	Endosulfan sulfate	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	Endrin	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	Endrin aldehyde	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	Endrin ketone	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-22	gamma-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	gamma-Chlordane	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	Heptachlor	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	Heptachlor epoxide	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-22	Methoxychlor	ug/L	U	U	U	0.50	U	U	U	0.50	U	U	U	0.50	U	U	U	0.50	0.50
MW-22	Toxaphene	ug/L	U	U	U	5.0	U	U	U	5.0	U	U	U	5.0	U	U	U	5.0	5.0
MW-23	4,4'-DDE	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-23	4,4'-DDD	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-23	4,4'-DDT	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-23	Aldrin	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-23	alpha-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-23	alpha-Chlordane	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-23	Ancho-1016	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-23	Ancho-1231	ug/L	U	U	U	2.0	U	U	U	2.0	U	U	U	2.0	U	U	U	2.0	2.0
MW-23	Ancho-1232	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-23	Ancho-1242	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-23	Ancho-1248	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-23	Ancho-1254	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-23	Ancho-1260	ug/L	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	U	U	U	1.0	1.0
MW-23	beta-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-23	delta-BHC	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-23	Dieldrin	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-23	Endosulfan I	ug/L	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	U	U	U	0.05	0.05
MW-23	Endosulfan II	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10
MW-23	Endosulfan sulfate	ug/L	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	U	U	U	0.10	0.10

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-23	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-23	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-23	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-23	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-23	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-23	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-23	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-23	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-23	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-24	4,4'-DDD	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-24	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-24	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-24	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-24	Anchor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-24	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-24	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-24	beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-24	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-24	Methoxychlor	ug/L		U	U	0.50		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-24	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-28	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-28	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	Anchor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10



Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-28	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-28	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-28	delta-heptachlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-28	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-29	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	Ancho-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Ancho-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-29	Ancho-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Ancho-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Ancho-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Ancho-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Ancho-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-29	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-29	delta-heptachlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-29	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-30	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-30	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-30	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-30	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-30	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-30	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-30	Ancho-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Ancho-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U		2.0	2.0
MW-30	Ancho-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Ancho-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Ancho-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Ancho-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Ancho-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-30	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-30	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-30	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	
MW-30	Endosulfan II	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-30	Endosulfan sulfate	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-30	Endrin	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-30	Endrin aldehyde	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-30	Endrin ketone	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-30	gamma-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-30	gamma-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-30	Heptachlor	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-30	Heptachlor epoxide	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-30	Methoxychlor	ug/L	NA				U	U	0.50		U	U	0.50		0.50
MW-30	Toxaphene	ug/L	NA				U	U	5.0		U	U	5.0		5.0
MW-31	4,4'-DDD	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	4,4'-DDE	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	4,4'-DDT	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	Aldrin	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	alpha-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	alpha-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	Ansch-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-31	Ansch-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-31	Ansch-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-31	Ansch-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-31	Ansch-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-31	Ansch-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-31	Ansch-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-31	beta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	delta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	Dieldrin	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	Endosulfan I	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	Endosulfan II	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	Endosulfan sulfate	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	Endrin	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	Endrin aldehyde	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	Endrin ketone	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-31	gamma-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	gamma-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	Heptachlor	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	Heptachlor epoxide	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-31	Methoxychlor	ug/L	NA				U	U	0.50		U	U	0.50		0.50
MW-31	Toxaphene	ug/L	NA				U	U	5.0		U	U	5.0		5.0
MW-32	4,4'-DDD	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-32	4,4'-DDE	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-32	4,4'-DDT	ug/L	NA				U	U	0.10		U	U	0.10		0.10
MW-32	Aldrin	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-32	alpha-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-32	alpha-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-32	Ansch-1016	ug/L		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-32	Ansch-1221	ug/L		U		2.0		U	U	2.0		U	U	2.0	2.0
MW-32	Ansch-1232	ug/L		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-32	Ansch-1242	ug/L		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-32	Ansch-1248	ug/L		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-32	Ansch-1254	ug/L		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-32	Ansch-1260	ug/L		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-32	beta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-32	delta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		0.05
MW-32	Dieldrin	ug/L	NA				U	U	0.10		U	U	0.10		0.10

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-32	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-32	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-32	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-32	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-32	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-32	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-32	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-32	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-32	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-32	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-32	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-32	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-33	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	alpha-BHC	ug/L	NA				0.03			NA		U	U	0.05		U	U	0.05	0.05
MW-33	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-33	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-33	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-33	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-33	Anchor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-33	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-33	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-33	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-33	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-33	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-33	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-34	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-34	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-34	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-34	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-34	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-34	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-34	Anchor-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-34	Anchor-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-34	Anchor-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-34	Anchor-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-34	Anchor-1248	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-34	Anchor-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-34	Anchor-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-34	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-34	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-14	Dieldrin	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-14	Endosulfan I	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-14	Endosulfan II	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-14	Endosulfan sulfate	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-14	Endrin	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-14	Endrin aldehyde	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-14	Endrin ketone	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-14	gamma-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-14	gamma-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-14	Heptachlor	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-14	Heptachlor epoxide	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-14	Methoxychlor	ug/L	NA				U	U	0.50		U	U	0.50		U	U	0.50		0.50
MW-14	Toxaphene	ug/L	NA				U	U	5.0		U	U	5.0		U	U	5.0		5.0
MW-16	4,4'-DDD	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	4,4'-DDE	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	4,4'-DDT	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	Aldrin	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	alpha-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	alpha-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	Anchor-1016	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-16	Anchor-1221	ug/L		U	U	2.0	U	U	2.0		U	U	2.0		U	U	2.0		2.0
MW-16	Anchor-1232	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-16	Anchor-1242	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-16	Anchor-1248	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-16	Anchor-1254	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-16	Anchor-1260	ug/L		U	U	1.0	U	U	1.0		U	U	1.0		U	U	1.0		1.0
MW-16	Beta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	delta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	Dieldrin	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	Endosulfan I	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	Endosulfan II	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	Endosulfan sulfate	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	Endrin	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	Endrin aldehyde	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	Endrin ketone	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-16	gamma-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	gamma-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	Heptachlor	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	Heptachlor epoxide	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-16	Methoxychlor	ug/L	NA				U	U	0.50		U	U	0.50		U	U	0.50		0.50
MW-16	Toxaphene	ug/L	NA				U	U	5.0		U	U	5.0		U	U	5.0		5.0
MW-17	4,4'-DDD	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-17	4,4'-DDE	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-17	4,4'-DDT	ug/L	NA				U	U	0.10		U	U	0.10		U	U	0.10		0.10
MW-17	Aldrin	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-17	alpha-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-17	alpha-Chlordane	ug/L	NA				U	U	0.05		U	U	0.05		U	U	0.05		0.05
MW-17	Anchor-1016	ug/L		U		1.0	U	U	1.0		U	U	1.0		U		1.0		1.0
MW-17	Anchor-1221	ug/L		U		2.0	U	U	2.0		U	U	2.0		U		2.0		2.0
MW-17	Anchor-1232	ug/L		U		1.0	U	U	1.0		U	U	1.0		U		1.0		1.0
MW-17	Anchor-1242	ug/L		U		1.0	U	U	1.0		U	U	1.0		U		1.0		1.0
MW-17	Anchor-1248	ug/L		U		1.0	U	U	1.0		U	U	1.0		U		1.0		1.0
MW-17	Anchor-1254	ug/L		U		1.0	U	U	1.0		U	U	1.0		U		1.0		1.0
MW-17	Anchor-1260	ug/L		U		1.0	U	U	1.0		U	U	1.0		U		1.0		1.0
MW-17	Beta-BHC	ug/L	NA				U	U	0.05		U	U	0.05		U		0.05		0.05

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Result	Event 1				Event 2				Event 3				Event 4				Highest Detection			
				I.Q.	DQ	Detect Limit		Result	I.Q.	DQ	Detect Limit		Result	I.Q.	DQ	Detect Limit		Result	I.Q.	DQ	Detect Limit		
MW-17	d,lis-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-17	Dieldrin	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-17	Endosulfan I	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-17	Endosulfan II	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-17	Endosulfan sulfate	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-17	Endrin	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-17	Endrin aldehyde	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-17	Endrin ketone	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-17	gamma-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-17	gamma-Chlordane	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-17	Heptachlor	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-17	Heptachlor epoxide	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-17	Methoxychlor	ug/L	NA					U	U		0.50		U	U		0.50		U	U		0.50		0.50
MW-17	Toxaphene	ug/L	NA					U	U		5.0		U	U		5.0		U	U		5.0		5.0
MW-18	4,4'-DDE	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	4,4'-DDE	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	4,4'-DMT	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	Aldrin	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	alpha-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	alpha-Chlordane	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	Ansch-1016	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-18	Ansch-1221	ug/L		U			2.0	U	U		2.0		U	U		2.0		U	U		2.0		2.0
MW-18	Ansch-1232	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-18	Ansch-1242	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-18	Ansch-1248	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-18	Ansch-1254	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-18	Ansch-1260	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-18	beta-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	d,lis-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	Dieldrin	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	Endosulfan I	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	Endosulfan II	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	Endosulfan sulfate	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	Endrin	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	Endrin aldehyde	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	Endrin ketone	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-18	gamma-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	gamma-Chlordane	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	Heptachlor	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	Heptachlor epoxide	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-18	Methoxychlor	ug/L	NA					U	U		0.50		U	U		0.50		U	U		0.50		0.50
MW-18	Toxaphene	ug/L	NA					U	U		5.0		U	U		5.0		U	U		5.0		5.0
MW-19	4,4'-DDE	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-19	4,4'-DDE	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-19	4,4'-DMT	ug/L	NA					U	U		0.10		U	U		0.10		U	U		0.10		0.10
MW-19	Aldrin	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-19	alpha-BHC	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-19	alpha-Chlordane	ug/L	NA					U	U		0.05		U	U		0.05		U	U		0.05		0.05
MW-19	Ansch-1016	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-19	Ansch-1221	ug/L		U			2.0	U	U		2.0		U	U		2.0		U	U		2.0		2.0
MW-19	Ansch-1232	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-19	Ansch-1242	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-19	Ansch-1248	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-19	Ansch-1254	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0
MW-19	Ansch-1260	ug/L		U			1.0	U	U		1.0		U	U		1.0		U	U		1.0		1.0

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-39	Beta-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	delta-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	Dieldrin	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-39	Endosulfan I	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	Endosulfan II	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-39	Endosulfan sulfate	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-39	Endrin	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-39	Endrin aldehyde	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-39	Endrin ketone	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-39	gamma-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	gamma-Chlordane	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	Heptachlor	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	Heptachlor epoxide	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-39	Methoxychlor	ug/L	NA				U	U		0.50	U	U		0.50	U	U		0.50	0.50
MW-39	Toxaphene	ug/L	NA				U	U		5.0	U	U		5.0	U	U		5.0	5.0
MW-40	4,4'-DDD	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	4,4'-DDE	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	4,4'-DDT	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	Aklrin	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	alpha-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	alpha-Chlordane	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	Anacor-1016	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-40	Anacor-1221	ug/L		U		2.0	U	U		2.0	U	U		2.0	U	U		2.0	2.0
MW-40	Anacor-1232	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-40	Anacor-1242	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-40	Anacor-1248	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-40	Anacor-1254	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-40	Anacor-1260	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-40	Beta-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	delta-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	Dieldrin	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	Endosulfan I	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	Endosulfan II	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	Endosulfan sulfate	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	Endrin	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	Endrin aldehyde	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	Endrin ketone	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-40	gamma-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	gamma-Chlordane	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	Heptachlor	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	Heptachlor epoxide	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-40	Methoxychlor	ug/L	NA				U	U		0.50	U	U		0.50	U	U		0.50	0.50
MW-40	Toxaphene	ug/L	NA				U	U		5.0	U	U		5.0	U	U		5.0	5.0
MW-41	4,4'-DDD	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-41	4,4'-DDE	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-41	4,4'-DDT	ug/L	NA				U	U		0.10	U	U		0.10	U	U		0.10	0.10
MW-41	Aklrin	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-41	alpha-BHC	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-41	alpha-Chlordane	ug/L	NA				U	U		0.05	U	U		0.05	U	U		0.05	0.05
MW-41	Anacor-1016	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-41	Anacor-1221	ug/L		U		2.0	U	U		2.0	U	U		2.0	U	U		2.0	2.0
MW-41	Anacor-1232	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-41	Anacor-1242	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-41	Anacor-1248	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0
MW-41	Anacor-1254	ug/L		U		1.0	U	U		1.0	U	U		1.0	U	U		1.0	1.0

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-41	Analyte-1260	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-41	Beta-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	Gamma-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	Dieldrin	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-41	Endosulfan I	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	Endosulfan II	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-41	Endosulfan sulfate	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-41	Endrin	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-41	Endrin aldehyde	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-41	Endrin ketone	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-41	gamma-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	gamma-Chlordane	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	Heptachlor	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	Heptachlor epoxide	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-41	Methoxychlor	ug/L	NA					U	U	0.50			U	0.50		U	U	0.50	0.50
MW-41	Toxaphene	ug/L	NA					U	U	5.0			U	5.0		U	U	5.0	5.0
MW-42	4,4'-DDD	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	4,4'-DDE	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	4,4'-DDT	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	Aldrin	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	alpha-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	alpha-Chlordane	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Analyte-1016	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Analyte-1221	ug/L		U		2.0		U	U	2.0			U	2.0		U	U	2.0	2.0
MW-42	Analyte-1232	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Analyte-1242	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Analyte-1248	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Analyte-1254	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Analyte-1260	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Beta-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Gamma-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Dieldrin	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	Endosulfan I	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Endosulfan II	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	Endosulfan sulfate	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	Endrin	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	Endrin aldehyde	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	Endrin ketone	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-42	gamma-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	gamma-Chlordane	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Heptachlor	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Heptachlor epoxide	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-42	Methoxychlor	ug/L	NA					U	U	0.50			U	0.50		U	U	0.50	0.50
MW-42	Toxaphene	ug/L	NA					U	U	5.0			U	5.0		U	U	5.0	5.0
MW-43	4,4'-DDD	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-43	4,4'-DDE	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-43	4,4'-DDT	ug/L	NA					U	U	0.10			U	0.10		U	U	0.10	0.10
MW-43	Aldrin	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-43	alpha-BHC	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-43	alpha-Chlordane	ug/L	NA					U	U	0.05			U	0.05		U	U	0.05	0.05
MW-43	Analyte-1016	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-43	Analyte-1221	ug/L		U		2.0		U	U	2.0			U	2.0		U	U	2.0	2.0
MW-43	Analyte-1232	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-43	Analyte-1242	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-43	Analyte-1248	ug/L		U		1.0		U	U	1.0			U	1.0		U	U	1.0	1.0

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-43	Aroclor 1254	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-43	Aroclor 1260	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-43	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-43	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-43	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-43	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-43	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-43	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-43	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-43	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-43	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-44	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	4,4'-DDT	ug/L	NA				0.01		U	NA		U	U	0.10		U	U	0.10	0.10
MW-44	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	Aroclor 1016	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-44	Aroclor 1221	ug/L		U		2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-44	Aroclor 1232	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-44	Aroclor 1242	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-44	Aroclor 1248	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-44	Aroclor 1254	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-44	Aroclor 1260	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-44	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-44	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-44	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-44	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-45	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-45	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-45	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-45	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-45	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-45	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-45	Aroclor 1016	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-45	Aroclor 1221	ug/L		U		2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-45	Aroclor 1232	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-45	Aroclor 1242	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0



Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LO	DQ	Detect Limit	Result	LO	DQ	Detect Limit	Result	LO	DQ	Detect Limit	Result	LO	DQ	Detect Limit	
MW-45	Anchor-1248	ug/L		U		1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-45	Anchor-1254	ug/L		U		1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-45	Anchor-1260	ug/L		U		1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-45	beta-BHC	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	delta-BHC	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	Dieldrin	ug/L	NA					U		0.10		U	U	0.10		U	U	0.10	0.10
MW-45	Endosulfan I	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	Endosulfan II	ug/L	NA					U		0.10		U	U	0.10		U	U	0.10	0.10
MW-45	Endosulfan sulfate	ug/L	NA					U		0.10		U	U	0.10		U	U	0.10	0.10
MW-45	Endrin	ug/L	NA					U		0.10		U	U	0.10		U	U	0.10	0.10
MW-45	Endrin aldehyde	ug/L	NA					U		0.10		U	U	0.10		U	U	0.10	0.10
MW-45	Endrin ketone	ug/L	NA					U		0.10		U	U	0.10		U	U	0.10	0.10
MW-45	gamma-BHC	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	gamma-Chlordane	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	Heptachlor	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	Heptachlor epoxide	ug/L	NA					U		0.05		U	U	0.05		U	U	0.05	0.05
MW-45	Methoxychlor	ug/L	NA					U		0.50		U	U	0.50		U	U	0.50	0.50
MW-45	Toxaphene	ug/L	NA					U		5.0		U	U	5.0		U	U	5.0	5.0
MW-46	4,4'-DDE	ug/L	NA				U	U		0.10		U	U	0.10		U	U	0.10	0.10
MW-46	4,4'-DDE	ug/L	NA				U	U		0.10		U	U	0.10		U	U	0.10	0.10
MW-46	4,4'-DDT	ug/L	NA				U	U		0.10		U	U	0.10		U	U	0.10	0.10
MW-46	Aldrin	ug/L	NA				U	U		0.05		U	U	0.05		U	U	0.05	0.05
MW-46	alpha-BHC	ug/L	NA				U	U		0.05		U	U	0.05		U	U	0.05	0.05
MW-46	alpha-Chlordane	ug/L	NA				U	U		0.05		U	U	0.05		U	U	0.05	0.05
MW-46	Anchor-1016	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	Anchor-1221	ug/L		U		2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-46	Anchor-1232	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	Anchor-1242	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	Anchor-1248	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	Anchor-1254	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	Anchor-1260	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-46	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-46	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-46	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-46	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-46	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-46	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-46	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-46	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-47	4,4'-DDE	ug/L	NA				U	U		0.10		U	U	0.10		U		0.10	0.10
MW-47	4,4'-DDE	ug/L	NA				U	U		0.10		U	U	0.10		U		0.10	0.10
MW-47	4,4'-DDT	ug/L	NA				U	U		0.10		U	U	0.10		U		0.10	0.10
MW-47	Aldrin	ug/L	NA				U	U		0.05		U	U	0.05		U		0.05	0.05
MW-47	alpha-BHC	ug/L	NA				U	U		0.05		U	U	0.05		U		0.05	0.05
MW-47	alpha-Chlordane	ug/L	NA				U	U		0.05		U	U	0.05		U		0.05	0.05
MW-47	Anchor-1016	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	Anchor-1221	ug/L		U		2.0		U	U	2.0		U	U	2.0		U		2.0	2.0
MW-47	Anchor-1232	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	
MW-47	Anchor-1242	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	Anchor-1248	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	Anchor-1254	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	Anchor-1260	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-47	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U		0.01	0.10
MW-47	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-47	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-47	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-47	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-47	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-47	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U		0.50	0.50
MW-47	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U		5.0	5.0
MW-48	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	Anchor-1016	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Anchor-1221	ug/L		U		2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-48	Anchor-1232	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Anchor-1242	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Anchor-1248	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Anchor-1254	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Anchor-1260	ug/L		U		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	beta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	delta-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	Dieldrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	Endosulfan I	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	Endosulfan II	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	Endosulfan sulfate	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	Endrin	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	Endrin aldehyde	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	Endrin ketone	ug/L	NA					U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-48	gamma-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	gamma-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	Heptachlor	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	Heptachlor epoxide	ug/L	NA					U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-48	Methoxychlor	ug/L	NA					U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-48	Toxaphene	ug/L	NA					U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-49	4,4'-DDD	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-49	4,4'-DDE	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-49	4,4'-DDT	ug/L	NA					U	U	0.10		U	U	0.10		U		0.10	0.10
MW-49	Aldrin	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-49	alpha-BHC	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-49	alpha-Chlordane	ug/L	NA					U	U	0.05		U	U	0.05		U		0.05	0.05
MW-49	Anchor-1016	ug/L		U		1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-49	Anchor-1221	ug/L		U		2.0		U	U	2.0		U	U	2.0		U		2.0	2.0

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-49	Anchur-1212	ug/L		U		1.0		U	U	1.0			U	1.0			U	1.0	1.0
MW-49	Anchur-1242	ug/L		U		1.0		U	U	1.0			U	1.0			U	1.0	1.0
MW-49	Anchur-124H	ug/L		U		1.0		U	U	1.0			U	1.0			U	1.0	1.0
MW-49	Anchur-1254	ug/L		U		1.0		U	U	1.0			U	1.0			U	1.0	1.0
MW-49	Anchur-12M	ug/L		U		1.0		U	U	1.0			U	1.0			U	1.0	1.0
MW-49	beta-BHC	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	delta-BHC	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	Dieldrin	ug/L	NA					U	U	0.10			U	0.10			U	0.10	0.10
MW-49	Endosulfan I	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	Endosulfan II	ug/L	NA					U	U	0.10			U	0.10			U	0.10	0.10
MW-49	Endosulfan sulfate	ug/L	NA					U	U	0.10			U	0.10			U	0.10	0.10
MW-49	Endrin	ug/L	NA					U	U	0.10			U	0.10			U	0.10	0.10
MW-49	Endrin aldehyde	ug/L	NA					U	U	0.10			U	0.10			U	0.10	0.10
MW-49	Endrin ketone	ug/L	NA					U	U	0.10			U	0.10			U	0.10	0.10
MW-49	gamma-BHC	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	gamma-Chlordane	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	Heptachlor	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	Heptachlor epoxide	ug/L	NA					U	U	0.05			U	0.05			U	0.05	0.05
MW-49	Methoxychlor	ug/L	NA					U	U	0.50			U	0.50			U	0.50	0.50
MW-49	Toxaphene	ug/L	NA					U	U	5.0			U	5.0			U	5.0	5.0
MW-50	4,4'-DDD	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	4,4'-DDE	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	4,4'-DDT	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	Aldrin	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	alpha-BHC	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	alpha-Chlordane	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	Anchur-1016	ug/L		U	U	1.0		U		1.0			U	U	1.0		U		1.0
MW-50	Anchur-1221	ug/L		U	U	2.0		U		2.0			U	U	2.0		U		2.0
MW-50	Anchur-1232	ug/L		U	U	1.0		U		1.0			U	U	1.0		U		1.0
MW-50	Anchur-1242	ug/L		U	U	1.0		U		1.0			U	U	1.0		U		1.0
MW-50	Anchur-124H	ug/L		U	U	1.0		U		1.0			U	U	1.0		U		1.0
MW-50	Anchur-1254	ug/L		U	U	1.0		U		1.0			U	U	1.0		U		1.0
MW-50	Anchur-12M	ug/L		U	U	1.0		U		1.0			U	U	1.0		U		1.0
MW-50	beta-BHC	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	delta-BHC	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	Dieldrin	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	Endosulfan I	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	Endosulfan II	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	Endosulfan sulfate	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	Endrin	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	Endrin aldehyde	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	Endrin ketone	ug/L		U	U	0.10		U		0.10			U	U	0.10		U		0.10
MW-50	gamma-BHC	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	gamma-Chlordane	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	Heptachlor	ug/L		U	U	0.05	0.002	U		NA			U	U	0.05		U		0.05
MW-50	Heptachlor epoxide	ug/L		U	U	0.05		U		0.05			U	U	0.05		U		0.05
MW-50	Methoxychlor	ug/L		U	U	0.5		U		0.50			U	U	0.50		U		0.50
MW-50	Toxaphene	ug/L		U	U	5.0		U		5.0			U	U	5.0		U		5.0
MW-51	4,4'-DDD	ug/L			U	0.10		U	U	0.10			U	U	0.10		U	U	0.10
MW-51	4,4'-DDE	ug/L			U	0.10		U	U	0.10			U	U	0.10		U	U	0.10
MW-51	4,4'-DDT	ug/L			U	0.10		U	U	0.10			U	U	0.10		U	U	0.10
MW-51	Aldrin	ug/L			U	0.05		U	U	0.05			U	U	0.05		U	U	0.05
MW-51	alpha-BHC	ug/L			U	0.05		U	U	0.05			U	U	0.05		U	U	0.05
MW-51	alpha-Chlordane	ug/L			U	0.05		U	U	0.05			U	U	0.05		U	U	0.05
MW-51	Anchur-1016	ug/L			U	1.0		U	U	1.0			U	U	1.0		U	U	1.0

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	I.Q	Detect Limit	Result	I.Q	DQ	Result	I.Q	DQ	Result	I.Q	DQ	
MW-51	Anchor-1221	ug/L		U	2.0		U	U		U	U		U	U	2.0
MW-51	Anchor-1232	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-51	Anchor-1242	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-51	Anchor-1248	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-51	Anchor-1254	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-51	Anchor-1260	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-51	beta-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	delta-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	Dieldrin	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-51	Endosulfan I	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	Endosulfan II	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-51	Endosulfan sulfate	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-51	Endrin	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-51	Endrin aldehyde	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-51	Endrin ketone	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-51	gamma-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	gamma-Chlordane	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	Heptachlor	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	Heptachlor epoxide	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-51	Methoxychlor	ug/L		U	0.5		U	U		U	U		U	U	0.50
MW-51	Toxaphene	ug/L		U	5.0		U	U		U	U		U	U	5.0
MW-52	4,4'-DDE	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	4,4'-DDE	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	4,4'-DDT	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	Aldrin	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	alpha-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	alpha-Chlordane	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	Anchor-1016	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-52	Anchor-1221	ug/L		U	2.0		U	U		U	U		U	U	2.0
MW-52	Anchor-1232	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-52	Anchor-1242	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-52	Anchor-1248	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-52	Anchor-1254	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-52	Anchor-1260	ug/L		U	1.0		U	U		U	U		U	U	1.0
MW-52	beta-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	delta-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	Dieldrin	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	Endosulfan I	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	Endosulfan II	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	Endosulfan sulfate	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	Endrin	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	Endrin aldehyde	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	Endrin ketone	ug/L		U	0.10		U	U		U	U		U	U	0.10
MW-52	gamma-BHC	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	gamma-Chlordane	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	Heptachlor	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	Heptachlor epoxide	ug/L		U	0.05		U	U		U	U		U	U	0.05
MW-52	Methoxychlor	ug/L		U	0.5		U	U		U	U		U	U	0.50
MW-52	Toxaphene	ug/L		U	5.0		U	U		U	U		U	U	5.0
MW-53	4,4'-DDE	ug/L		U	0.10		U			U	U		U	U	0.10
MW-53	4,4'-DDE	ug/L		U	0.10		U			U	U		U	U	0.10
MW-53	4,4'-DDT	ug/L		U	0.10		U			U	U		U	U	0.10
MW-53	Aldrin	ug/L		U	0.05		U			U	U		U	U	0.05
MW-53	alpha-BHC	ug/L		U	0.05		U			U	U		U	U	0.05
MW-53	alpha-Chlordane	ug/L		U	0.05		U			U	U		U	U	0.05

Appendix C  
Maximum Concentrations of Pesticides and PCBs  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	Result	I.Q.	D.Q.	Detect Limit	
MW-53	Ancho-1016	ug/L		U	U	1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Ancho-1221	ug/L		U	U	2.0		U		2.0		U	U	2.0		U	U	2.0	2.0
MW-53	Ancho-1232	ug/L		U	U	1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Ancho-1242	ug/L		U	U	1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Ancho-1246	ug/L		U	U	1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Ancho-1254	ug/L		U	U	1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Ancho-1260	ug/L		U	U	1.0		U		1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Beta-BHC	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	delta-BHC	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	Dieldrin	ug/L		U	U	0.10		U		0.10		U	U	0.10		U	U	0.10	0.10
MW-53	Endosulfan I	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	Endosulfan II	ug/L		U	U	0.10		U		0.10		U	U	0.10		U	U	0.10	0.10
MW-53	Endosulfan sulfate	ug/L		U	U	0.10		U		0.10		U	U	0.10		U	U	0.10	0.10
MW-53	Endrin	ug/L		U	U	0.10		U		0.10		U	U	0.10		U	U	0.10	0.10
MW-53	Endrin aldehyde	ug/L		U	U	0.10		U		0.10		U	U	0.10		U	U	0.10	0.10
MW-53	Endrin ketone	ug/L		U	U	0.10		U		0.10		U	U	0.10		U	U	0.10	0.10
MW-53	gamma-BHC	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	gamma-Chlordane	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	Heptachlor	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	Heptachlor epoxide	ug/L		U	U	0.05		U		0.05		U	U	0.05		U	U	0.05	0.05
MW-53	Methoxychlor	ug/L		U	U	0.5		U		0.50		U	U	0.50		U	U	0.50	0.50
MW-53	Toxaphene	ug/L		U	U	5.0		U		5.0		U	U	5.0		U	U	5.0	5.0
MW-54	4,4'-DDD	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	4,4'-DDE	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	4,4'-DDT	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	Aldrin	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	alpha-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	alpha-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	Ancho-1016	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Ancho-1221	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-54	Ancho-1232	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Ancho-1242	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Ancho-1246	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Ancho-1254	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Ancho-1260	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Beta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	delta-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	Dieldrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	Endosulfan I	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	Endosulfan II	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	Endosulfan sulfate	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	Endrin	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	Endrin aldehyde	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	Endrin ketone	ug/L		U	U	0.10		U	U	0.10		U	U	0.10		U	U	0.10	0.10
MW-54	gamma-BHC	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	gamma-Chlordane	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	Heptachlor	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	Heptachlor epoxide	ug/L		U	U	0.05		U	U	0.05		U	U	0.05		U	U	0.05	0.05
MW-54	Methoxychlor	ug/L		U	U	0.5		U	U	0.50		U	U	0.50		U	U	0.50	0.50
MW-54	Toxaphene	ug/L		U	U	5.0		U	U	5.0		U	U	5.0		U	U	5.0	5.0
MW-55	4,4'-DDD	ug/L			U	0.10			U	0.10			U	0.10			U	0.10	0.10
MW-55	4,4'-DDE	ug/L			U	0.10			U	0.10			U	0.10			U	0.10	0.10
MW-55	4,4'-DDT	ug/L			U	0.10			U	0.10			U	0.10			U	0.10	0.10
MW-55	Aldrin	ug/L			U	0.05			U	0.05			U	0.05			U	0.05	0.05
MW-55	alpha-BHC	ug/L			U	0.05			U	0.05			U	0.05			U	0.05	0.05

**Appendix C**  
**Maximum Concentrations of Pesticides and PCBs**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	Result	I.Q	DQ	Detect Limit	
MW-55	alpha-Chlordane	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	Anchor-1016	ug/L			U	1.0			U	U	1.0			U	U	U	U	1.0	1.0
MW-55	Anchor-1221	ug/L			U	2.0			U	U	2.0			U	U	U	U	2.0	2.0
MW-55	Anchor-1232	ug/L			U	1.0			U	U	1.0			U	U	U	U	1.0	1.0
MW-55	Anchor-1242	ug/L			U	1.0			U	U	1.0			U	U	U	U	1.0	1.0
MW-55	Anchor-1248	ug/L			U	1.0			U	U	1.0			U	U	U	U	1.0	1.0
MW-55	Anchor-1254	ug/L			U	1.0			U	U	1.0			U	U	U	U	1.0	1.0
MW-55	Anchor-1260	ug/L			U	1.0			U	U	1.0			U	U	U	U	1.0	1.0
MW-55	beta-BHC	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	delta-BHC	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	Dieldrin	ug/L			U	0.10			U	U	0.10			U	U	U	U	0.10	0.10
MW-55	Endosulfan I	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	Endosulfan II	ug/L			U	0.10			U	U	0.10			U	U	U	U	0.10	0.10
MW-55	Endosulfan sulfate	ug/L			U	0.10			U	U	0.10			U	U	U	U	0.10	0.10
MW-55	Endrin	ug/L			U	0.10			U	U	0.10			U	U	U	U	0.10	0.10
MW-55	Endrin aldehyde	ug/L			U	0.10			U	U	0.10			U	U	U	U	0.10	0.10
MW-55	Endrin ketone	ug/L			U	0.10			U	U	0.10			U	U	U	U	0.10	0.10
MW-55	gamma-BHC	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	gamma-Chlordane	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	Heptachlor	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	Heptachlor epoxide	ug/L			U	0.05			U	U	0.05			U	U	U	U	0.05	0.05
MW-55	Methoxychlor	ug/L			U	0.5			U	U	0.50			U	U	U	U	0.50	0.50
MW-55	Toxaphene	ug/L			U	5.0			U	U	5.0			U	U	U	U	5.0	5.0

Appendix C  
Maximum Concentrations of Inorganics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-1S	Aluminum	ug/L	NA					B	U	122		B	U	105	891	N	J	10	891
M-1S	Antimony	ug/L	NA					U	U	1.0		U	U	2.0		U	U	1.0	2.0
M-1S	Arsenic	ug/L	NA					B	U	3.0		U	U	2.0	2.1	B		2.0	3.0
M-1S	Barium	ug/L	NA				562			1.0	528	E	J	1.0				1.0	908
M-1S	Beryllium	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Cadmium	ug/L	NA				1.0	B		1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Calcium	ug/L	NA				270,000			7.0	212,000	E	J	7.0	251,000		J	8.0	270,000
M-1S	Chromium (total)	ug/L	NA				1.8	B		1.0		B	U	3.6	23			1.0	23
M-1S	Cobalt	ug/L	NA				2.3	B		1.0	2.2	B		1.0	5.1	B		1.0	5.1
M-1S	Copper	ug/L	NA				1.2	B		1.0		B	U	3.0		B	U	8.3	8.3
M-1S	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
M-1S	Iron	ug/L	NA				23,600	N	J	4.0	19,700	E	J	8.0	13,300			6.0	23,600
M-1S	Lead	ug/L	NA					U	U	1.0		U	U	1.0	2.5	B		1.0	2.5
M-1S	Magnesium	ug/L	NA				88,800			5.0	73,400	E	J	3.0	91,100		J	3.0	91,100
M-1S	Manganese	ug/L	NA				704			1.0	577	E	J	1.0	347			1.0	704
M-1S	Mercury	ug/L	NA					U	U	0.20		U	U	0.20		U	U	0.20	0.20
M-1S	Nickel	ug/L	NA				7.5	B		1.0		B	U	6.2	22	B		1.0	22
M-1S	Potassium	ug/L	NA				42,800			27	46,400	E	J	18	38,100	E	J	16	46,400
M-1S	Selenium	ug/L	NA					U	U	2.0		U	U	2.0		U	U	2.0	2.0
M-1S	Silver	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-1S	Sodium	ug/L	NA				81,200	E	J	20	67,300	E	J	89	125,000	E	J	76	125,000
M-1S	Thallium	ug/L	NA					U	U	3.0		U	U	2.0		U	U	2.0	3.0
M-1S	Vanadium	ug/L	NA				3.0	B		1.0	1.8	B		1.0	3.4	B		1.0	3.4
M-1S	Zinc	ug/L	NA					B	U	11		B	U	15			U	21	21
M-3S	Aluminum	ug/L	NA					U	U	109		B	U	72	197		J	NA	197
M-3S	Antimony	ug/L	NA					U	U	1.0		U	U	2.0			U	1.0	2.0
M-3S	Arsenic	ug/L	NA					U	B	10	6.7	B		2.0	15			NA	15
M-3S	Barium	ug/L	NA				280			1.0	112	BE	J	1.0	212			NA	280
M-3S	Beryllium	ug/L	NA					U	U	1.0		U	U	1.0			U	1.0	1.0
M-3S	Cadmium	ug/L	NA					U	U	1.0		U	U	1.0			U	1.0	1.0
M-3S	Calcium	ug/L	NA				20,000			7.0	85,400	E	J	7.0	132,500		J	NA	132,500
M-3S	Chromium (total)	ug/L	NA					U		1.0		B	U	4.3	8.7			NA	8.7
M-3S	Cobalt	ug/L	NA				2,900		B	1.0	1.5	B		1.0	1.1			NA	2,900
M-3S	Copper	ug/L	NA				2,500		B	1.0		B	U	3.5			U	4.5	2,500
M-3S	Cyanide (total)	ug/L	NA						U	10		U	U	10			U	10	10
M-3S	Iron	ug/L	NA				2,880	N	J	4.0	2,820	E	J	8.0	4,475			NA	4,475
M-3S	Lead	ug/L	NA					U		1.0		B	U	3.0	1.4			NA	3.0
M-3S	Magnesium	ug/L	NA				47,800			5.0	30,300	E	J	3.0	38,550		J	NA	47,800
M-3S	Manganese	ug/L	NA				1,240			1.0	618	E	J	1.0	485			NA	1,240
M-3S	Mercury	ug/L	NA					U		0.20		U	U	0.20			U	0.20	0.20
M-3S	Nickel	ug/L	NA				12	B		1.0		B	U	8.0	10			NA	12
M-3S	Potassium	ug/L	NA				21,200			27	8,330	E	J	18	13,400		J	NA	21,200
M-3S	Selenium	ug/L	NA					U		2.0		U	U	2.0			U	2.0	2.0
M-3S	Silver	ug/L	NA					U		1.0		U	U	1.0			U	1.0	1.0
M-3S	Sodium	ug/L	NA				30,400	E	J	20	24,100	E	J	89	42,500		J	NA	42,500
M-3S	Thallium	ug/L	NA					U		3.0		U	U	2.0			U	2.0	3.0
M-3S	Vanadium	ug/L	NA					U		1.0	1.5	B		1.0	3.1			NA	3.1
M-3S	Zinc	ug/L	NA					B	U	14		B	U	17			U	17	17
M-41)	Aluminum	ug/L	NA					B	U	147		U	U	17	1,140	N	J	10	1,140
M-41)	Antimony	ug/L	NA					B	U	1.1		U	U	2.0		U	U	1.0	2.0
M-41)	Arsenic	ug/L	NA					B	U	2.5		U	U	2.0		U	U	2.0	2.5
M-41)	Barium	ug/L	NA				204			1.0	179	B		1.0	177	B		1.0	204

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
M-40	Beryllium	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-40	Cadmium	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-40	Calcium	ug/L	NA				99,100			7.0	84,100			7.0	88,000		J	8.0	99,100
M-40	Chromium (total)	ug/L	NA				1.3	B		1.0		B	U	2.7	14			1.0	14
M-40	Cobalt	ug/L	NA					U	U	1.0		U	U	1.0	1.2	B		1.0	1.2
M-40	Copper	ug/L	NA					U	U	1.0		B	U	4.3		B	U	4.2	4.3
M-40	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
M-40	Iron	ug/L	NA				1,900	N	J	4.0	1,700			8.0	2,990			6.0	2,990
M-40	Lead	ug/L	NA					U	U	1.0		B	U	2.1	3.1			1.0	3.1
M-40	Magnesium	ug/L	NA				45,600			5.0	39,800			3.0	41,000		J	3.0	45,600
M-40	Manganese	ug/L	NA				37			1.0	34			1.0	56			1.0	56
M-40	Mercury	ug/L	NA					U	U	0.20		U	U	0.20		U	U	0.20	0.20
M-40	Nickel	ug/L	NA				3.3	B		1.0		B	U	2.5	12	B		1.0	12
M-40	Potassium	ug/L	NA				4,490	B		27		BE	UJ	4,890	4,640	BE	J	16	4,890
M-40	Selenium	ug/L	NA					U	U	2.0		U	U	2.0		U	U	2.0	2.0
M-40	Silver	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-40	Sodium	ug/L	NA				78,300	E	J	20	71,700			89	70,600	E	J	76	78,300
M-40	Thallium	ug/L	NA					U	U	3.0		U	U	2.0		U	U	2.0	3.0
M-40	Vanadium	ug/L	NA					U	U	1.0		U	U	1.0	2.0	B		1.0	2.0
M-40	Zinc	ug/L	NA					B	U	10		B	U	19		B	U	13	19
M-45	Aluminum	ug/L	NA				548			11	653			17	1,120	N	J	10	1,120
M-45	Antimony	ug/L	NA					U		1.0		U	U	2.0		U	U	1.0	2.0
M-45	Arsenic	ug/L	NA				4.0	B		2.0	5.5	B		2.0	6.8	B		2.0	6.8
M-45	Barium	ug/L	NA				553			1.0	737			1.0	446			1.0	737
M-45	Beryllium	ug/L	NA					U	U	1.0	1.2	B		1.0		U	U	1.0	1.2
M-45	Cadmium	ug/L	NA				1.0	B		1.0		U	U	1.0		U	U	1.0	1.0
M-45	Calcium	ug/L	NA				356,000			7.0	397,000			7.0	281,000		J	8.0	397,000
M-45	Chromium (total)	ug/L	NA				68			1.0		B	U	5.8	29			1.0	68
M-45	Cobalt	ug/L	NA				8.2	B		1.0	6.3	B		1.0	5.4	B		1.0	8.2
M-45	Copper	ug/L	NA					B	U	9.0		B	U	5.9		B	U	11	11
M-45	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
M-45	Iron	ug/L	NA				29,300			14	39,500			8.0	22,000			6.0	39,500
M-45	Lead	ug/L	NA				6.1			1.0		B	U	2.2	3.5			1.0	6.1
M-45	Magnesium	ug/L	NA				57,300			5.0	49,500			3.0	47,800		J	3.0	57,300
M-45	Manganese	ug/L	NA				582			1.0	353			1.0	557			1.0	582
M-45	Mercury	ug/L	NA					U	U	0.20		U	U	0.20		U	U	0.20	0.20
M-45	Nickel	ug/L	NA				75			1.0		B	U	17	28	B		1.0	75
M-45	Potassium	ug/L	NA				20,000	E	J	27		E	UJ	23,000	22,800	E	J	16	23,000
M-45	Selenium	ug/L	NA					U	U	2.0		U	U	2.0		U	U	2.0	2.0
M-45	Silver	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
M-45	Sodium	ug/L	NA				98,000			180	130,000			89	72,800	E	J	76	130,000
M-45	Thallium	ug/L	NA					U	U	3.0		U	U	2.0		U	U	2.0	3.0
M-45	Vanadium	ug/L	NA				3.5	B		1.0	3.4	B		1.0	3.9	B		1.0	3.9
M-45	Zinc	ug/L	NA						U	23			U	20			U	30	30
MW-06	Aluminum	ug/L	150	B		NA		B	U	87	106	B		17	180	BN	J	10	180
MW-06	Antimony	ug/L		B	U	2.1		U	U	1.0		U	U	2.0		U	U	1.0	2.1
MW-06	Arsenic	ug/L	72			NA	11			2.0	17			2.0	42			2.0	72
MW-06	Barium	ug/L	281			NA	182	B		1.0	168	B		1.0	369			1.0	369
MW-06	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-06	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-06	Calcium	ug/L	216,000			NA	177,000			7.0	174,000			7.0	174,000		J	8.0	216,000
MW-06	Chromium (total)	ug/L	24			NA	20			1.0	15			1.0	33			1.0	33



**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-06	Cobalt	ug/L	3.6	B		NA	3.6	B		1.0	2.8	B		1.0	1.5	B		1.0	3.6
MW-06	Copper	ug/L	7.6	B		NA	52	B		1.0	15	B		1.0		B	U	7.5	52
MW-06	Cyanide (total)	ug/L		U	U	10	17			1.0	15			1.0		U	U	10	17
MW-06	Iron	ug/L	16,500			NA	1,590			14	3,230			8.0	14,300			6.0	16,500
MW-06	Lead	ug/L	7.6			NA	1.2	B		1.0	9.6			1.0	9.0			1.0	10
MW-06	Magnesium	ug/L	37,600			NA	32,200			5.0	34,400			3.0	34,200		J	3.0	37,600
MW-06	Manganese	ug/L	2,900			NA	486			1.0	1,500			1.0	2,170			1.0	2,900
MW-06	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-06	Nickel	ug/L	39	B		NA	33	B		1.0	17	B		1.0	25	B		1.0	39
MW-06	Potassium	ug/L	27,400	E	J	NA	24,100	E	J	27	19,000			18	16,900	E	J	16	27,400
MW-06	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-06	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-06	Sodium	ug/L	121,000			NA	449,000	E	J	180	134,000			26	79,300	E	J	76	449,000
MW-06	Thallium	ug/L		B	U	3.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-06	Vanadium	ug/L	3.8	B		NA		U	U	1.0		U	U	1.0		U	U	1.0	3.8
MW-06	Zinc	ug/L		B	U	13		B	U	11			U	27			U	20	27
MW-07	Aluminum	ug/L	NA				1,630			11	1,030			17	1,280	N	J	10	1,630
MW-07	Antimony	ug/L	NA					B	U	2.2		U	U	2.0		U	U	1.0	2.2
MW-07	Arsenic	ug/L	NA					B	U	3.5		U	U	2.0		U	U	2.0	3.5
MW-07	Barium	ug/L	NA				138	B		1.0	124	B		1.0	132	B		1.0	138
MW-07	Beryllium	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-07	Cadmium	ug/L	NA					U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-07	Calcium	ug/L	NA				113,000			7.0	97,000	E	J	7.0	102,000		J	8.0	113,000
MW-07	Chromium (total)	ug/L	NA				94			4.0	18			1.0	44			1.0	94
MW-07	Cobalt	ug/L	NA				2.4	B		1.0	1.5	B		1.0	1.9	B		1.0	2.4
MW-07	Copper	ug/L	NA				16	B		1.0	7.2	B		1.0	11	B	J	1.0	16
MW-07	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-07	Iron	ug/L	NA				6,790			4.0	4,630			8.0	5,570			6.0	6,790
MW-07	Lead	ug/L	NA				5.8			1.0			U	5.8	3.9			1.0	5.8
MW-07	Magnesium	ug/L	NA				30,000			5.0	29,100			3.0	28,600		J	3.0	30,000
MW-07	Manganese	ug/L	NA				219			1.0	195			1.0	205			1.0	219
MW-07	Mercury	ug/L	NA					U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-07	Nickel	ug/L	NA					B	U	38	14	B		1.0	31	B		1.0	38
MW-07	Potassium	ug/L	NA				2,660	BE	J	27	2,170	B		18	2,190	BE	J	16	2,660
MW-07	Selenium	ug/L	NA					U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-07	Silver	ug/L	NA					UN	R	1.0		U	U	1.0		U	U	1.0	1.0
MW-07	Sodium	ug/L	NA				18,900			180	19,000			89	20,200	E	J	76	20,900
MW-07	Thallium	ug/L	NA					U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-07	Vanadium	ug/L	NA				3.4	B		1.0	2.2	B		1.0	2.8	B		1.0	3.4
MW-07	Zinc	ug/L	NA						U	23	22			1.0			U	30	30
MW-08	Aluminum	ug/L		U	U	16	612			11		B	U	97	839	N	J	10	839
MW-08	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-08	Arsenic	ug/L	4.4	B		NA		B	U	5.7	5.1	B		2.0	6.1	B		2.0	6.1
MW-08	Barium	ug/L	128	B		NA	99	B		1.0	126	B		1.0	111	B		1.0	128
MW-08	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-08	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-08	Calcium	ug/L	58,300			NA	46,800			7.0	53,000	E	J	7.0	55,200		J	8.0	58,300
MW-08	Chromium (total)	ug/L		B	U	1.9	21			4.0	3.4	B		1.0	37			1.0	37
MW-08	Cobalt	ug/L		U	U	1.0		U	U	1.0		U	U	1.0	1.8	B		1.0	1.8
MW-08	Copper	ug/L		U	U	1.0		B	U	4.7	1.5	B		1.0		B	U	7.3	7.3
MW-08	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-08	Iron	ug/L	1,030			NA	2,950			4.0	3,080			8.0	3,420			6.0	3,420

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**American Chemical Services NPL Site**  
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Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-08	Lead	ug/L		U	U	1.0	3.4			1.0		B	U	2.7	3.1			1.0	3.4
MW-08	Magnesium	ug/L	18,600			NA	14,700			5.0	17,100			3.0	17,700		J	3.0	18,600
MW-08	Manganese	ug/L	108			NA	102			1.0	173			1.0	134			1.0	173
MW-08	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-08	Nickel	ug/L		B	U	2.4		B	U	4.9	2.5	B		1.0	23	B		1.0	23
MW-08	Potassium	ug/L	1,540	B		NA	1,260	BE	J	27	1,260	B		18	1,410	BE	J	16	1,540
MW-08	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-08	Silver	ug/L		U	U	1.0		UN	R	1.0		U	U	1.0		U	U	1.0	1.0
MW-08	Sodium	ug/L	12,700			NA	10,200			180	12,800			89	13,500	E	J	76	13,500
MW-08	Thallium	ug/L		U	U	2.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-08	Vanadium	ug/L		U	U	1.0	1.2	B		1.0		U	U	1.0	2.0	B		1.0	2.0
MW-08	Zinc	ug/L		B	U	7.4			U	25		B	U	8.0			U	34	34
MW-09	Aluminum	ug/L		U	U	16	2,580	N*	J	11		U		53	863			10	2,580
MW-09	Antimony	ug/L		U	U	1.0		U	U	1.0		U		2.0		U	U	1.0	2.0
MW-09	Arsenic	ug/L	3.2	B		NA	6.8	B		2.0	2.5			NA	3.4	B		2.0	6.8
MW-09	Barium	ug/L	337			NA	301			1.0	331			NA	349			1.0	349
MW-09	Beryllium	ug/L		U	U	1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-09	Cadmium	ug/L		U	U	1.0	2.4	B		1.0			U	1.0		U	U	1.0	2.4
MW-09	Calcium	ug/L	159,000			NA	135,000			7.0	152,000			NA	155,000			8.0	159,000
MW-09	Chromium (total)	ug/L		B	U	2.4	45			4.0			U	2.2	12			1.0	45
MW-09	Cobalt	ug/L	3.5	B		NA	9.3	B		1.0	5.4			NA	6.0	B		1.0	9.3
MW-09	Copper	ug/L		U	U	1.0	24	B		1.0			U	1.2		B	U	6.0	24
MW-09	Cyanide (total)	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-09	Iron	ug/L	17,800			NA	20,700			4.0	15,650			NA	16,900			6.0	20,700
MW-09	Lead	ug/L		U	U	1.0	6.7			1.0			U	1.0	2.9	B		1.0	6.7
MW-09	Magnesium	ug/L	33,000			NA	28,000			5.0	25,750			NA	26,100			3.0	33,000
MW-09	Manganese	ug/L	211			NA	249			1.0	184			NA	219			1.0	249
MW-09	Mercury	ug/L		U	U	0.20	0.67	N*	J	0.20			U	0.20		U	U	0.20	0.7
MW-09	Nickel	ug/L		B	U	4.6	38	B		1.0		U		4.0	13	B		1.0	38
MW-09	Potassium	ug/L	10,800			NA	9,140	E	J	27			U	11,150	11,000	E	J	16	11,150
MW-09	Selenium	ug/L		U	U	2.0			U	2.0			U	2.0		U	U	2.0	2.0
MW-09	Silver	ug/L		U	U	1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-09	Sodium	ug/L	110,000			NA	82,600			180	68,750			NA	66,400	E	J	76	110,000
MW-09	Thallium	ug/L		U	U	2.0		U	U	3.0			U	2.0		B	U	2.1	3.0
MW-09	Vanadium	ug/L	5.0	B		NA	9.6	B		1.0	3.8			NA	5.4	B		1.0	10
MW-09	Zinc	ug/L		B	U	4.5			U	41			U	8.0			U	23	41
MW-10C	Aluminum	ug/L	1,170			NA			U	275	3,535			NA	6,990	N	J	10	6,990
MW-10C	Antimony	ug/L		U	U	1.0		B	U	1.3	2.8			NA		U	U	1.0	2.8
MW-10C	Arsenic	ug/L	2.4	B		NA		B	U	4.3	3.2			NA	10			2.0	10
MW-10C	Barium	ug/L	368			NA	372			1.0	342			NA	337			1.0	372
MW-10C	Beryllium	ug/L		U	U	1.0		U	U	1.0	1.3			NA		U	U	1.0	1.3
MW-10C	Cadmium	ug/L		U	U	1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-10C	Calcium	ug/L	118,000			NA	122,000			7.0	131,500			NA	141,000		J	8.0	141,000
MW-10C	Chromium (total)	ug/L	14			NA	3.6	B		1.0	29			NA	360			1.0	360
MW-10C	Cobalt	ug/L	2.9	B		NA	2.1	B		1.0	4.7			NA	14	B		1.0	14
MW-10C	Copper	ug/L		B	U	4.4	5.9	B		1.0	12			NA	46		J	1.0	46
MW-10C	Cyanide (total)	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-10C	Iron	ug/L	10,100			NA	9,000	N	J	4.0	12,950			NA	21,300			6.0	21,300
MW-10C	Lead	ug/L	3.2		J	NA	1.8	B		1.0	5.6			NA	19			1.0	19
MW-10C	Magnesium	ug/L	57,200			NA	58,300			5.0	60,200			NA	65,900		J	3.0	65,900
MW-10C	Manganese	ug/L	107			NA	74			1.0	287			NA	447			1.0	447
MW-10C	Mercury	ug/L		U	U	0.20		U	U	0.20			U	0.20		U	U	0.20	0.20

Appendix C  
Maximum Concentrations of Inorganics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-10C	Nickel	ug/L	14	B		NA	7.7	B		1.0			U	28	257			1.0	257
MW-10C	Potassium	ug/L	6,150			NA	4,700	B		27			UJ	6,710	7,440	E	J	16	7,440
MW-10C	Selenium	ug/L		U	U	2.0		U	U	2.0			U	2.0		U	U	2.0	2.0
MW-10C	Silver	ug/L		U	U	1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-10C	Sodium	ug/L	193,000			NA	183,000	E	J	20	162,500			NA	158,000	E	J	76	193,000
MW-10C	Thallium	ug/L		U	U	2.0		U	U	3.0			U	2.0		U	U	2.0	3.0
MW-10C	Vanadium	ug/L	3.8	B		NA		U	U	1.0	8.0			NA	15	B		1.0	15
MW-10C	Zinc	ug/L			U	27		B	U	13	82			NA	119		J	1.0	119
MW-11	Aluminum	ug/L	1,460			NA	1,470	EN	J	11	633			17	421			10	1,470
MW-11	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-11	Arsenic	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-11	Barium	ug/L	24	B		NA	21	B		1.0	17	B		1.0	27	B		1.0	27
MW-11	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-11	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-11	Calcium	ug/L	44,300			NA	38,300			7.0	33,400	E	J	7.0	35,700			8.0	44,300
MW-11	Chromium (total)	ug/L		B	U	4.8	2.9	B		1.0	5.0	B		1.0	2.9	B		12	12
MW-11	Cobalt	ug/L	2.2	B		NA	2.2	B		1.0	2.1	B		1.0	1.3	B		1.0	2.2
MW-11	Copper	ug/L	11	B		NA		B	U	10	7.9	B		1.0		B	U	3.9	11
MW-11	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-11	Iron	ug/L	2,910			NA	2,010			4.0	2,280			8.0	1,600			6.0	2,910
MW-11	Lead	ug/L			UJ	7.9	5.3			1.0			U	5.3			U	4.6	7.9
MW-11	Magnesium	ug/L	18,200			NA	16,300			5.0	13,400			3.0	11,400			3.0	18,200
MW-11	Manganese	ug/L	145			NA	139			1.0	128			1.0	525			1.0	525
MW-11	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-11	Nickel	ug/L	8.8	B		NA	7.4	B		1.0	7.5	B		1.0	4.5	B		1.0	8.8
MW-11	Potassium	ug/L	2,450	B		NA	1,880	BE	J	27	1,590	B		18	1,150	BE	J	16	2,450
MW-11	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-11	Silver	ug/L		U	U	1.0		U	UJ	1.0		U	U	1.0		U	U	1.0	1.0
MW-11	Sodium	ug/L	4,360	B		NA		B	U	3,310	4,410	B		89		B	U	4,890	4,890
MW-11	Thallium	ug/L		U	U	2.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-11	Vanadium	ug/L	6.5	B		NA	3.8	B		1.0	4.0	B		1.0	1.4	B		1.0	6.5
MW-11	Zinc	ug/L	91			NA		B	U	40	23			1.0		B	U	14	91
MW-12	Aluminum	ug/L	311			NA	2,020	EN	J	11	786			17	1,690			10	2,020
MW-12	Antimony	ug/L			U	1.0		U	U	1.0		U	U	2.0		B	U	1.2	2.0
MW-12	Arsenic	ug/L	4.7			NA	7.6	B		2.0		U	U	2.0	7.8	B	J	2.0	7.8
MW-12	Barium	ug/L	81			NA	83	B		1.0	48	B		1.0	73	B		1.0	83
MW-12	Beryllium	ug/L			U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-12	Cadmium	ug/L			U	1.0	1.5	B		1.0		U	U	1.0		U	U	1.0	1.5
MW-12	Calcium	ug/L	55,700			NA	45,900			7.0	43,900	E	J	7.0	47,400			8.0	55,700
MW-12	Chromium (total)	ug/L			U	5.1	12			1.0	4.6	B		1.0	8.9	B	J	1.0	12
MW-12	Cobalt	ug/L			U	1.0	2.4	B		1.0	1.1	B		1.0	2.4	B	J	1.0	2.4
MW-12	Copper	ug/L			UJ	6.3	17	B		1.0	5.6	B		1.0	15	B	J	1.0	17
MW-12	Cyanide (total)	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW-12	Iron	ug/L	18,600			N	30,100			4.0	10,800			8.0	24,400			6.0	30,100
MW-12	Lead	ug/L	12		J	N	11			1.0			U	4.1	12			1.0	12
MW-12	Magnesium	ug/L	18,850			NA	17,500			5.0	15,700			3.0	17,300			3.0	18,850
MW-12	Manganese	ug/L	1,340			NA	1,050			1.0	1,070			1.0	1,210			1.0	1,340
MW-12	Mercury	ug/L			U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-12	Nickel	ug/L	4.4			NA	13	B		1.0	3.5	B		1.0	7.4	B		1.0	13
MW-12	Potassium	ug/L	4,780			NA	2,860	BE	J	27	2,610	B		18	2,930	BE	J	16	4,780
MW-12	Selenium	ug/L			U	2.1		U	U	2.0		U	U	2.0		U	U	2.0	2.1
MW-12	Silver	ug/L			U	1.0		U	UJ	1.0		U	U	1.0		U	U	1.0	1.0

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit		
MW-12	Sodium	ug/L	20,000			NA			U	7,360				89			E	UJ	10,600	20,000
MW-12	Thallium	ug/L			U	2.0			U	U	3.0		U	U	2.0		B	U	2.3	3.0
MW-12	Vanadium	ug/L	14		J	NA	24	B		1.0	7.9	B		1.0	20		B		1.0	24
MW-12	Zinc	ug/L			U	10			U	39		B	U	12				U	27	39
MW-13	Aluminum	ug/L	232			NA	96	B		11	427			17			B	U	172	427
MW-13	Antimony	ug/L		U	U	1.0			U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-13	Arsenic	ug/L		U	U	2.0			U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-13	Barium	ug/L	67		B	NA	55	B		1.0	68	B		1.0	69		B		1.0	69
MW-13	Beryllium	ug/L			U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Cadmium	ug/L			U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Calcium	ug/L	118,000			1	103,000			7.0	107,000			7.0	130,000				8.0	130,000
MW-13	Chromium (total)	ug/L		B	U				U	U	4.0		B	U	4.2		U	U	1.0	4.2
MW-13	Cobalt	ug/L	1.9		B	NA			U	U	1.0	1.7	B		1.0		U	U	1.0	1.9
MW-13	Copper	ug/L		B	U	5.9		B	U	2.5		B	U	4.3		B	U	2.3	5.9	5.9
MW-13	Cyanide (total)	ug/L			U	U	10		U	U	10		U	U	10		U	U	10	10
MW-13	Iron	ug/L	5,240			NA	6,090			4.0	5,700			8.0	4,420				6.0	6,090
MW-13	Lead	ug/L		B	U	2.0			U	U	1.0		B	U	2.3		U	U	1.0	2.3
MW-13	Magnesium	ug/L	32,000			NA	27,000			5.0	30,000			3.0	37,000				3.0	37,000
MW-13	Manganese	ug/L	674			NA	657			1.0	656			1.0	604				1.0	674
MW-13	Mercury	ug/L		U	U	0.20			U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-13	Nickel	ug/L	3.1		B	NA		B	U	2.4		B	U	4.3			B	U	1.9	4.3
MW-13	Potassium	ug/L	2,940	BE	J	NA	1,900	BE	J	27		BE	UJ	2,820	2,020	BE	J	16	2,940	2,940
MW-13	Selenium	ug/L		U	U	2.0			U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-13	Silver	ug/L		U	U	1.0		UN	R	1.0		U	U	1.0		U	U	1.0	1.0	1.0
MW-13	Sodium	ug/L	27,800			NA	30,700			180	35,700			89	24,600	E	J	76	35,700	35,700
MW-13	Thallium	ug/L		B	U	2.0			U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-13	Vanadium	ug/L	1.7		B	NA			U	U	1.0	1.8	B		1.0		U	U	1.0	1.8
MW-13	Zinc	ug/L		B	U	12		B	U	12		B	U	17		B	U	12	17	17
MW-14	Aluminum	ug/L	780			NA	2,550			11	13,800			17	7,180				10	13,800
MW-14	Antimony	ug/L		U	U	1.0			U	U	1.0	2.3	B		2.0		B	U	1.3	2.3
MW-14	Arsenic	ug/L		U	U	2.0			U	U	2.0	11		2.0	9.2	B			2.0	11
MW-14	Barium	ug/L	122		B	NA	33	B		1.0	112	B		1.0	88	B			1.0	122
MW-14	Beryllium	ug/L		U	U	1.0			U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Cadmium	ug/L		U	U	1.0			U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Calcium	ug/L	142,000			NA	26,100			7.0	104,000			7.0	96,400				8.0	142,000
MW-14	Chromium (total)	ug/L		B	U	8.6	12			1.0	36			1.0	26				1.0	36
MW-14	Cobalt	ug/L	9.1		B	NA	2.3	B		1.0	12	B		1.0	8.3	B			1.0	12
MW-14	Copper	ug/L	11		B	NA		B	U	9.0	26			1.0	32				1.0	32
MW-14	Cyanide (total)	ug/L		U	U	10			U	U	10		U	U	10		U	U	10	10
MW-14	Iron	ug/L	1,650			NA	5,610			14	33,000			8.0	25,000				6.0	33,000
MW-14	Lead	ug/L	9.8		J	NA	17			1.0	19			1.0	20				1.0	20
MW-14	Magnesium	ug/L	26,200			NA	6,830			5.0	25,600	J		3.0	22,000				3.0	26,200
MW-14	Manganese	ug/L	831			NA	60			1.0	351			1.0	290				1.0	831
MW-14	Mercury	ug/L		U	U	0.20			U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-14	Nickel	ug/L	17		B	NA	9.3	B		1.0		B	U	29	22	B			1.0	29
MW-14	Potassium	ug/L	12,500			NA	2,770	BE	J	27		E	UJ	9,870	6,440	E	J	16	12,500	12,500
MW-14	Selenium	ug/L		U	U	2.0			U	U	2.0	2.3	B		2.0		U	U	2.0	2.3
MW-14	Silver	ug/L		U	U	1.0			U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Sodium	ug/L	37,900			NA	3,610	B		180	9,460			89		E	UJ	11,600	37,900	37,900
MW-14	Thallium	ug/L		U	U	2.0			U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-14	Vanadium	ug/L	1.6		B	NA	6.4	B		1.0	34	B		1.0	21	B			1.0	34
MW-14	Zinc	ug/L			U	21			U	27	63			1.0	59				1.0	63

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-15	Aluminum	ug/L		B	U	135	472			11	308			17	487	N	J	10	487
MW-15	Antimony	ug/L		U	U	1.0	1.3	B		1.0		U	U	2.0		U	U	1.0	2.0
MW-15	Arsenic	ug/L	59			NA	37			2.0	41			2.0	58			2.0	59
MW-15	Barium	ug/L	1,470			NA	1,240			1.0	1,070	E	J	1.0	1,340			1.0	1,470
MW-15	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Calcium	ug/L	94,100			NA	78,800			7.0	67,900	E	J	7.0	73,000		J	8.0	94,100
MW-15	Chromium (total)	ug/L		B	U	2.0	4.9	B		1.0		B	U	4.1	13			1.0	13
MW-15	Cobalt	ug/L	5.1	B		NA	4.1	B		1.0	3.8	B		1.0	4.6	B		1.0	5.1
MW-15	Copper	ug/L		B	U	1.6	26			1.0		B	U	12	13	B	J	1.0	26
MW-15	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-15	Iron	ug/L	7,900			NA	5,550			14	5,510	E	J	8.0	7,010			6.0	7,900
MW-15	Lead	ug/L		B	U	24		U	U	1.0		U	U	1.0	1.3	B		1.0	24
MW-15	Magnesium	ug/L	93,100			NA	73,600			5.0	66,800	E	J	3.0	74,300		J	3.0	93,100
MW-15	Manganese	ug/L	534			NA	276			1.0	167	E	J	1.0	141			1.0	534
MW-15	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-15	Nickel	ug/L	23	B		NA	19	B		1.0	19	B		1.0	24	B		1.0	24
MW-15	Potassium	ug/L	122,000	E	J	NA	102,000	E	J	27	96,500	E	J	18	118,000	E	J	16	122,000
MW-15	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-15	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-15	Sodium	ug/L	459,000			NA	311,000	E	J	180	347,000	E	J	440	415,000	E	J	76	459,000
MW-15	Thallium	ug/L		B	U	3.1		U	U	3.0		U	U	2.0		B	U	2.8	3.1
MW-15	Vanadium	ug/L	1.5	B		NA		U	U	1.0		U	U	1.0	1.1	B		1.0	1.5
MW-15	Zinc	ug/L		B	U	13		B	U	9.1		U	U	44		B	U	18	44
MW-18	Aluminum	ug/L		U	U	16		B	U	56		B	U	56		B	U	36	56
MW-18	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-18	Arsenic	ug/L		U	U	2.0		B	U	2.4		U	U	2.0		U	U	2.0	2.4
MW-18	Barium	ug/L	35	B		NA	34	B		1.0	25	BE	J	1.0	32	B		1.0	35
MW-18	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Calcium	ug/L	81,600			NA	88,500			7.0	63,700	E	J	7.0	64,200			8.0	88,500
MW-18	Chromium (total)	ug/L	17			NA	30			1.0		B	U	5.8	71			1.0	71
MW-18	Cobalt	ug/L	1.1	B		NA		U	U	1.0		U	U	1.0		U	U	1.0	1.1
MW-18	Copper	ug/L		B	U	1.2	2.8	B		1.0		B	U	6.7	13	B		1.0	13
MW-18	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-18	Iron	ug/L	288			NA	165	N	J	4.0		BE	U	34		U		208	288
MW-18	Lead	ug/L	1.6	B	J	NA	1.5	B		1.0	6.3			1.0	14			1.0	14
MW-18	Magnesium	ug/L	28,500			NA	27,300			5.0	19,600	E	J	3.0	18,900			3.0	28,500
MW-18	Manganese	ug/L	609			NA	83			1.0	24	E	J	1.0	85			1.0	609
MW-18	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-18	Nickel	ug/L		B	U	3.0	3.3	B		1.0		B	U	2.4	6.2	B		1.0	6.2
MW-18	Potassium	ug/L	3,850	B		NA	2,420	B		27	2,720	BE	J	18	3,220	BE	J	16	3,850
MW-18	Selenium	ug/L	3.0	B		NA		U	U	2.0	3.2	B		2.0	3.9	B		2.0	3.9
MW-18	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-18	Sodium	ug/L	34,400			NA	64,600	E	J	20	67,700	E	J	89	67,500	E	J	76	67,700
MW-18	Thallium	ug/L		U	U	2.0		U	U	3.0		U	U	2.0		B	U	2.8	3.0
MW-18	Vanadium	ug/L	1.1	B		NA		U	U	1.0		U	U	1.0	1.5	B		1.0	1.5
MW-18	Zinc	ug/L		B	U	7.0		B	U	14		U		67		U		20	67
MW-19	Aluminum	ug/L	283			NA	322			11	421			17	402			10	421
MW-19	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-19	Arsenic	ug/L	27			NA			U	24	21			2.0	27			2.0	27
MW-19	Barium	ug/L	673			NA	666			1.0	587			1.0	648			1.0	673

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-19	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Calcium	ug/L	79,400			NA	72,700			7.0	73,400			7.0	85,300			8.0	85,300
MW-19	Chromium (total)	ug/L		B	U	6.8	5.5	B		1.0	10			1.0	8.2	B		1.0	10
MW-19	Cobalt	ug/L	1.4	B		NA	1.6	B		1.0	2.3	B		1.0	1.5	B		1.0	2.3
MW-19	Copper	ug/L		B	U	5.0	4.9	B		1.0		B	U	6.7	184			1.0	184
MW-19	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-19	Iron	ug/L	4,810			NA	4,630	N	J	4.0	4,370			8.0	4,660			6.0	4,810
MW-19	Lead	ug/L	1.5	B	J	NA		U	U	1.0	3.7			1.0	2.4	B		1.0	3.7
MW-19	Magnesium	ug/L	67,700			NA	65,000			5.0	56,200			3.0	63,900			3.0	67,700
MW-19	Manganese	ug/L	268			NA	165			1.0	243			1.0	243			1.0	268
MW-19	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-19	Nickel	ug/L	18	B		NA	19	B		1.0	16	B		1.0	17	B		1.0	19
MW-19	Potassium	ug/L	113,000			NA	114,000			27	86,800			18	98,000	E	J	16	114,000
MW-19	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-19	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-19	Sodium	ug/L	772,000			NA	975,000	E	J	100	663,000			130	719,000	E	J	76	975,000
MW-19	Thallium	ug/L	2.4	B		NA		U	U	3.0	3.7	B		2.0		B	U	4.7	4.7
MW-19	Vanadium	ug/L		U	U	1.0		U	U	1.0	1.6	B		1.0		U	U	1.0	1.6
MW-19	Zinc	ug/L		B	U	8.6			U	16		B	U	14		B	U	16	16
MW-22	Aluminum	ug/L		B	U	36		B	U	115	218			17	579			10	579
MW-22	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		B	U	3.8	3.8
MW-22	Arsenic	ug/L		U	U	2.0		B	U	3.3		U	U	2.0		U	U	2.0	3.3
MW-22	Barium	ug/L	170	B		NA	580			1.0	547			1.0	628			1.0	628
MW-22	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-22	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-22	Calcium	ug/L	84,700			NA	238,000			7.0	234,000			7.0	254,000			8.0	254,000
MW-22	Chromium (total)	ug/L		B	U	5.0	9.7	B		1.0	12			1.0	20			1.0	20
MW-22	Cobalt	ug/L	1.0	B		NA		U	U	1.0	1.2	B		1.0	1.3	B		1.0	1.3
MW-22	Copper	ug/L	39			NA	3.8	B		1.0		B	U	11	125			1.0	125
MW-22	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW-22	Iron	ug/L	322			NA	389	N	J	4.0	746			8.0	1,340			6.0	1,340
MW-22	Lead	ug/L	2.5	B	J	NA	5.2			1.0	4.9			1.0	6.8			1.0	6.8
MW-22	Magnesium	ug/L	36,600			NA	41,500			5.0	38,500			3.0	39,100			3.0	41,500
MW-22	Manganese	ug/L	15			NA	16			1.0	39			1.0	49			1.0	49
MW-22	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-22	Nickel	ug/L	6.6	B		NA	11	B		1.0	9.5	B		1.0	18	B		1.0	18
MW-22	Potassium	ug/L	93,100			NA	17,600			27	22,100			18	24,700	E	J	16	93,100
MW-22	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-22	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-22	Sodium	ug/L	301,000			NA	242,000	E	J	20	257,000			130	338,000	E	J	76	338,000
MW-22	Thallium	ug/L		U	U	2.0		U	U	3.0		U	U	2.0		B	U	2.6	3.0
MW-22	Vanadium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-22	Zinc	ug/L		U		21		B	U	15		B	U	18		B	U	18	21
MW-23	Aluminum	ug/L	2,120			NA	2,480			11	265			NA	2,440			10	2,480
MW-23	Antimony	ug/L		U	U	1.0		U	U	1.0			U	2.0		U	U	1.0	2.0
MW-23	Arsenic	ug/L	3.7	B		NA		B	U	5.3			U	2.0	3.5	B		2.0	5.3
MW-23	Barium	ug/L	130	B		NA	140	B		1.0	118			NA	133	B		1.0	140
MW-23	Beryllium	ug/L		U	U	1.0		U	U	1.0		U		1.0		U	U	1.0	1.0
MW-23	Cadmium	ug/L		U	U	1.0		U	U	1.0		U		1.0		U	U	1.0	1.0
MW-23	Calcium	ug/L	71,100			NA	86,500			7.0	72,350		J	NA	84,800			8.0	86,500
MW-23	Chromium (total)	ug/L	19			NA	19			4.0	5.3			NA	19			12	19

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-23	Cobalt	ug/L	18	B		NA	4.2	B		1.0	1.3			NA	4.7	B		1.0	4.7
MW-23	Copper	ug/L	14	B		NA	16	B		1.0	2.6			NA	20	B		1.0	20
MW-23	Cyanide (total)	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-23	Iron	ug/L	9,450			NA	11,700			4.0	5,580			NA	11,300			6.0	11,700
MW-23	Lead	ug/L	6.3		J	NA	7.6			1.0			U	2.2			U	7.7	7.7
MW-23	Magnesium	ug/L	19,400			NA	23,100			5.0	18,850			NA	23,800			3.0	23,800
MW-23	Manganese	ug/L	295			NA	361			1.0	245			NA	377			1.0	377
MW-24	Mercury	ug/L		U	U	0.20		U	U	0.20			U	0.20		U	U	0.20	0.20
MW-23	Nickel	ug/L	18	B		NA		B	U	18	4.1			NA	20	B		1.0	20
MW-23	Potassium	ug/L	4,350	B		NA	4,090	BE	J	27	3,245			NA	3,940	BE	J	16	4,350
MW-23	Selenium	ug/L		U	U	2.0		U	U	2.0			U	2.0		U	U	2.0	2.0
MW-23	Silver	ug/L		U	U	1.0		UN	R	1.0			U	1.0		U	U	1.0	1.0
MW-23	Sodium	ug/L	65,000			NA	73,400			180	64,600			NA	75,300			22	75,300
MW-23	Thallium	ug/L		U	U	2.0		U	U	3.0			U	2.0		U	U	2.0	3.0
MW-23	Vanadium	ug/L	7.1	B		NA	6.9	B		1.0	2.3			NA	6.7	B		1.0	7.1
MW-23	Zinc	ug/L			U	30			U	33			U	10			U	33	33
MW-24	Aluminum	ug/L	4,850			NA	1,100			11	14,800			17	9,660			10	14,800
MW-24	Antimony	ug/L		U	U	1.0		U	U	1.0			U	2.0		U	U	1.0	2.0
MW-24	Arsenic	ug/L	4.5	B		NA		B	U	4.6	10			2.0	7.7	B		2.0	10
MW-24	Barium	ug/L	314			NA	186	B		1.0	386			1.0	330			1.0	386
MW-24	Beryllium	ug/L		U	U	1.0		U	U	1.0	1.6	B		1.0	1.2	B		1.0	1.6
MW-24	Cadmium	ug/L		U	U	1.0		U	U	1.0			U	1.0		U	U	1.0	1.0
MW-24	Calcium	ug/L	162,000			NA	114,000			7.0	170,000	E	J	7.0	161,000			8.0	170,000
MW-24	Chromium (total)	ug/L	28			NA	14			4.0	143			1.0	62			12	143
MW-24	Cobalt	ug/L	7.0	B		NA	1.4	B		1.0	14	B		1.0	8.9	B		1.0	14
MW-24	Copper	ug/L	41			NA	14	B		1.0	94			1.0	58			1.0	94
MW-24	Cyanide (total)	ug/L		U	U	10		U	U	10			U	10		U	U	10	10
MW-24	Iron	ug/L	28,300			NA	7,890			4.0	51,500			8.0	36,300			6.0	51,500
MW-24	Lead	ug/L	18		J	NA	3.9			1.0	25			1.0	17			1.0	25
MW-24	Magnesium	ug/L	44,100			NA	28,500			5.0	51,800			3.0	45,700			3.0	51,800
MW-24	Manganese	ug/L	546			NA	239			1.0	696			1.0	566			1.0	696
MW-24	Mercury	ug/L		U	U	0.20		U	U	0.20			U	0.20		U	U	0.20	0.20
MW-24	Nickel	ug/L	23	B		NA		B	U	6.8	96			1.0	44			1.0	96
MW-24	Potassium	ug/L	4,540	B		NA	2,020	BE	J	27	9,750			18	6,240	E	J	16	9,750
MW-24	Selenium	ug/L		U	U	2.0		U	U	2.0			U	2.0	2.6	B		2.0	2.6
MW-24	Silver	ug/L		U	U	1.0		UN	R	1.0			U	1.0		U	U	1.0	1.0
MW-24	Sodium	ug/L	90,400			NA	95,600			180	89,700			89	62,900			22	95,600
MW-24	Thallium	ug/L		U	U	2.0	4.0	B		3.0			U	2.0		U	U	2.0	4.0
MW-24	Vanadium	ug/L	16	B		NA	2.7	B		1.0	30	B		1.0	20	B		1.0	30
MW-24	Zinc	ug/L			U	67			U	25	97			1.0	62			1.0	97
MW-28	Aluminum	ug/L		B	U	11	2,650	EN	J	11	691			17	2,850	N	J	10	2,850
MW-28	Antimony	ug/L		U	U	1.0		U	U	1.0			U	2.0		U	U	1.0	2.0
MW-28	Arsenic	ug/L		U	U	2.0	2.4	B		2.0			U	2.0	4.9	B		2.0	4.9
MW-28	Barium	ug/L	95	B		NA	131	B		1.0	102	B		1.0	123	B		1.0	131
MW-28	Beryllium	ug/L		U	U	1.0		U	U	1.0			U	1.0	1.1	B		1.0	1.1
MW-28	Cadmium	ug/L		U	U	1.0		U	U	0.20			U	1.0		U	U	1.0	1.0
MW-28	Calcium	ug/L	79,400			NA	96,300			7.0	77,900	E	J	7.0	96,800		J	8.0	96,800
MW-28	Chromium (total)	ug/L		U	U	1.0	108			1.0	51			1.0	71			1.0	108
MW-28	Cobalt	ug/L		U	U	1.0	5.2	B		1.0	2.0	B		1.0	6.4	B		1.0	6.4
MW-28	Copper	ug/L		U	U	1.0	55			1.0	14	B		1.0	41		J	1.0	55
MW-28	Cyanide (total)	ug/L	NA					U	U	8.0			U	10		U	U	10	10
MW-28	Iron	ug/L	1,840			NA	7,030			4.0	2,880			8.0	7,090			6.0	7,090

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**American Chemical Services NPL Site**  
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Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-28	Lead	ug/L		U	U	1.0	12			1.0		U		4.6	11			1.0	12
MW-28	Magnesium	ug/L	38,100			NA	41,400	B		5.0	35,200			3.0	39,700		J	3.0	41,400
MW-28	Manganese	ug/L	119			NA	155			1.0	72			1.0	169			1.0	169
MW-28	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-28	Nickel	ug/L		B	U	1.0	74			1.0	36	B		1.0	49			1.0	74
MW-28	Potassium	ug/L	3,580	BE		NA	3,040	BE	J	27	2,220	B		18	2,980	BE	J	16	3,580
MW-28	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-28	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-28	Sodium	ug/L	14,100			NA	15,300			185	14,400			89	16,400	E	J	76	16,400
MW-28	Thallium	ug/L		U	U	3.0		U	U	2.0		U	U	2.0		B	U	2.5	3.0
MW-28	Vanadium	ug/L		U	U	1.0	5.7			1.0	1.7	B		1.0	7.1	B		1.0	7.1
MW-28	Zinc	ug/L		B	U	10			U	49	20			1.0			U	42	49
MW-29	Aluminum	ug/L	131	B		NA		B	U	93	635			17		B	U	91	635
MW-29	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-29	Arsenic	ug/L		U	U	2.0		B	U	2.9		U	U	2.0		U	U	2.0	2.9
MW-29	Barium	ug/L	62	B		NA	27	B		1.0	140	B		1.0	116	B		1.0	140
MW-29	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Calcium	ug/L	65,200				59,400			7.0	115,000			7.0	93,500			8.0	115,000
MW-29	Chromium (total)	ug/L	16			NA	5.1	B		1.0	24			1.0		B	U	1.7	24
MW-29	Cobalt	ug/L	1.0	B		NA		U	U	1.0	2.6	B		1.0		U	U	1.0	2.6
MW-29	Copper	ug/L		B	U	1.0	15	B		1.0	15	B		1.0		B	U	2.6	15
MW-29	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-29	Iron	ug/L	3,030			NA	335	N	J	4.0	7,410			8.0	5,790			6.0	7,410
MW-29	Lead	ug/L			U	1.0	2.1	B		1.0		B	U	2.4	1.0	B		1.0	2.4
MW-29	Magnesium	ug/L	33,500			NA	26,100			5.0	55,700			3.0	42,500			3.0	55,700
MW-29	Manganese	ug/L	218			NA	86			1.0	118			1.0	97			1.0	218
MW-29	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-29	Nickel	ug/L	20	B		NA	31	B		1.0		B	U	29		B	U	5.0	31
MW-29	Potassium	ug/L	7,040	E		NA	5,090			27		BE	U	3,580	2,950	BE	J	16	7,040
MW-29	Selenium	ug/L		B	U	2.0			U	2.0		U	U	2.0		U	U	2.0	2.0
MW-29	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-29	Sodium	ug/L	50,700			NA	39,800	E	J	20	76,100			89	73,900	E	J	76	76,100
MW-29	Thallium	ug/L		U	U	3.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-29	Vanadium	ug/L		U	U	1.0		U	U	1.0	1.8	B		1.0		U	U	1.0	1.8
MW-29	Zinc	ug/L		B	U	10		B	U	18			U	22		B	U	11	22
MW-30	Aluminum	ug/L		B	U	11		B	U	127	277			17	1,830	N	J	NA	1,830
MW-30	Antimony	ug/L		U	U	1.0		B	U	1.6		U	U	2.0	1.1	B	U	NA	2.0
MW-30	Arsenic	ug/L		B	U	2.0		B	U	2.3		U	U	2.0	4.3	B		NA	4.3
MW-30	Barium	ug/L	181	B		NA	58	B		1.0	197	B		1.0	210			NA	210
MW-30	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-30	Calcium	ug/L	99,100			NA	56,700			7.0	90,500			7.0	170,000			NA	170,000
MW-30	Chromium (total)	ug/L	8.9	B		NA	12			1.0		B	U	7.9	50			NA	50
MW-30	Cobalt	ug/L	1.4	B		NA	2.1	B		1.0	3.7	B		1.0	15	B		NA	15
MW-30	Copper	ug/L		B	U	1.0	6.1	B		1.0		B	U	3.7	40			NA	40
MW-30	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U		10	10
MW-30	Iron	ug/L	5,980			8.0	252	N	J	4.0	3,900			8.0	8,590			NA	8,590
MW-30	Lead	ug/L		B	U	1.0	1.4	B		1.0		B	U	1.6	8.0			NA	8.0
MW-30	Magnesium	ug/L	51,000			7.0	21,000			5.0	45,300			3.0	49,200			NA	51,000
MW-30	Manganese	ug/L	223			1.0	240			1.0	51			1.0	139			NA	240
MW-30	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U		0.20	0.20



**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	
MW-30	Nickel	ug/L	22	B		32	B			B	U	59			59
MW-30	Potassium	ug/L	4,980	BE		2,520	B			BE	U	3,260	BE	J	4,980
MW-30	Selenium	ug/L		U	U		U	U		U	U		U		2.0
MW-30	Silver	ug/L		U	U		U	U		U	U		U		1.0
MW-30	Sodium	ug/L	40,900			21,100	E	J	33,400			36,660			40,900
MW-30	Thallium	ug/L		U	U		U	U		U	U		U		3.0
MW-30	Vanadium	ug/L		U	U		U	U		U	U	3.8	B		3.8
MW-30	Zinc	ug/L		B	U		B	U		B	U	40		U	40
MW-31	Aluminum	ug/L		B	U	739			412			1,890	N	J	1,890
MW-31	Antimony	ug/L	2.7	B			U	U		U	U		U	U	2.7
MW-31	Arsenic	ug/L		B	U		B	U	4.3	B		7.5	B		7.5
MW-31	Barium	ug/L	200			228			246			245			246
MW-31	Beryllium	ug/L		U	U		U	U		U	U		U	U	1.0
MW-31	Cadmium	ug/L		U	U		U	U		U	U		U	U	1.0
MW-31	Calcium	ug/L	80,900			85,600			96,400	E	J	94,900		J	96,400
MW-31	Chromium (total)	ug/L	14			42			24			89			89
MW-31	Cobalt	ug/L	2.0	B		2.2	B		2.1	B		4.3	B		4.3
MW-31	Copper	ug/L		B	U	52			24	B		44		J	52
MW-31	Cyanide (total)	ug/L	NA				U	U		U	U		U	U	10
MW-31	Iron	ug/L	2,640			5,530			3,730			6,230			6,230
MW-31	Lead	ug/L		B	U	4.8			8.9			8.2			8.9
MW-31	Magnesium	ug/L	33,900			30,900			35,100			34,100		J	35,100
MW-31	Manganese	ug/L	122			126			141			174			174
MW-31	Mercury	ug/L		U	U		U	U		U	U		U	U	0.20
MW-31	Nickel	ug/L	33	B			B	U	29	B		66			66
MW-31	Potassium	ug/L	3,870	BE		2,100	BE	J	2,130	B		2,410	BE	J	3,870
MW-31	Selenium	ug/L		U	U		U	U		U	U		U	U	2.0
MW-31	Silver	ug/L		U	U		UN	R		U	U		U	U	1.0
MW-31	Sodium	ug/L	17,500			17,500			19,100			19,800	E	J	19,800
MW-31	Thallium	ug/L		U	U		U	U		U	U		U	U	3.0
MW-31	Vanadium	ug/L		U	U	1.4	B		1.3	B		4.3	B		4.3
MW-31	Zinc	ug/L		B	U			U	30					U	38
MW-32	Aluminum	ug/L	766			10,500			1,190			780	N	J	10,500
MW-32	Antimony	ug/L		U	U		U	U		U	U		U	U	2.0
MW-32	Arsenic	ug/L		B	U		B	U	2.1	B			U	U	4.9
MW-32	Barium	ug/L	63			258			205			169	B		258
MW-32	Beryllium	ug/L		U	U	1.5	B			U	U		U	U	1.5
MW-32	Cadmium	ug/L		U	U		U	U		U	U		U	U	1.0
MW-32	Calcium	ug/L	49,100			77,700			66,500	E	J	75,200		J	77,700
MW-32	Chromium (total)	ug/L	9.2	B		63			149			21			149
MW-32	Cobalt	ug/L		U	U	3.2	B		2.4	B		1.4	B		3.2
MW-32	Copper	ug/L		B	U	28			30			13	B	J	30
MW-32	Cyanide (total)	ug/L	NA				U	U		U	U		U	U	10
MW-32	Iron	ug/L	1,550			14,600			5,840			4,860			14,600
MW-32	Lead	ug/L		B	U	11			7.0			3.9			11
MW-32	Magnesium	ug/L	23,300			48,000			41,800			47,300		J	48,000
MW-32	Manganese	ug/L	219			146			86			78			219
MW-32	Mercury	ug/L		U	U		U	U		U	U		U	U	0.20
MW-32	Nickel	ug/L	8.6	B				U	96			19	B		96
MW-32	Potassium	ug/L	5,560		E	5,020	E	J	4,500	B		4,630	BE	J	5,560
MW-32	Selenium	ug/L		U	U		U	U		U	U		U	U	2.0
MW-32	Silver	ug/L		U	U		UN	R		U	U		U	U	1.0

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-12	Sodium	ug/L	55,000			36	36,900			180	38,200			89	35,400	E	J	76	55,000
MW-12	Thallium	ug/L		U	U	3.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-12	Vanadium	ug/L		U	U	1.0	5.6	B		1.0	1.6	B		1.0	1.3	B		1.0	5.6
MW-12	Zinc	ug/L		B	U	10			U	47	22			1.0			U		47
MW-13	Aluminum	ug/L		B	U	11		B	U	114		B	U	153		B	U	195	195
MW-13	Antimony	ug/L		U	U	1.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-13	Arsenic	ug/L		B	U	2.0	23			2.0	19			2.0	20			2.0	23
MW-13	Barium	ug/L	902			1.0	1,340			1.0	1,200			1.0	1,200			1.0	1,340
MW-13	Beryllium	ug/L		U	U	1.0		U	U	1.0	1.0	B		1.0		U	U	1.0	1.0
MW-13	Cadmium	ug/L	1.4	B		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.4
MW-13	Calcium	ug/L	248,000			18	313,000			7.0	273,000			7.0	290,000			8.0	313,000
MW-13	Chromium (total)	ug/L	15			1.0	3.6	B		1.0		B	U	5.8	9.8	B		1.0	15
MW-13	Cobalt	ug/L	6.1	B		1.0	3.6	B		1.0	3.0	B		1.0	3.4	B		1.0	6.1
MW-13	Copper	ug/L		B	U	1.0	4.8	B		1.0		B	U	8.6	15	B		1.0	15
MW-13	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-13	Iron	ug/L	24,600			8.0	28,500	N	J	4.0	25,300			8.0	27,000			6.0	28,500
MW-13	Lead	ug/L			U	1.0	1.0	B		1.0		B	U	1.3	1.5	B		1.0	1.5
MW-13	Magnesium	ug/L	56,900			7.0	70,500			5.0	63,000			3.0	65,900			3.0	70,500
MW-13	Manganese	ug/L	686			1.0	111			1.0	102			1.0	128			1.0	686
MW-13	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-13	Nickel	ug/L	48			1.0	20	B		1.0		B	U	18	22	B		1.0	48
MW-13	Potassium	ug/L	13,900	E		22	14,300			27		E	UJ	15,000	15,500	E	J	16	15,000
MW-13	Selenium	ug/L		B	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-13	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-13	Sodium	ug/L	188,000			36	195,000	E	J	20	179,000			89	178,000	E	J	76	195,000
MW-13	Thallium	ug/L	3.8	B		3.0		U	U	3.0		U	U	2.0		U	U	2.0	3.8
MW-13	Vanadium	ug/L	1.8	B		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.8
MW-13	Zinc	ug/L			U	10		B	U	12			U	27		B	U	16	27
MW-14	Aluminum	ug/L		B	U	11	1,140			11	364			17		B	U	167	1,140
MW-14	Antimony	ug/L	2.1	B		2.0		U	U	1.0		U	U	2.0		U	U	1.0	2.1
MW-14	Arsenic	ug/L		U	U	2.0		B	U	2.8		U	U	2.0		U	U	2.0	2.8
MW-14	Barium	ug/L	151	B		1.0	165	B		1.0	176	B		1.0	176	B		1.0	176
MW-14	Beryllium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Calcium	ug/L	78,500			18	82,200			7.0	85,700			7.0	84,300			8.0	85,700
MW-14	Chromium (total)	ug/L	2.9	B		1.0	25			1.0	38			1.0	17			1.0	38
MW-14	Cobalt	ug/L	1.3	B		1.0	2.4	B		1.0	1.4	B		1.0		U	U	1.0	2.4
MW-14	Copper	ug/L		B	U	1.0	22	B		1.0	24	B		1.0	13	B		1.0	24
MW-14	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-14	Iron	ug/L	4,360			8.0	3,520	N	J	4.0	4,320			8.0	3,190			6.0	4,360
MW-14	Lead	ug/L		B	U	1.0	1.9	B		1.0			U	3.8	2.9	B		1.0	3.8
MW-14	Magnesium	ug/L	46,000			7.0	48,600			5.0	49,500			3.0	51,000			3.0	51,000
MW-14	Manganese	ug/L	138			1.0	68			1.0	56			1.0	42			1.0	138
MW-14	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-14	Nickel	ug/L		B	U	1.0	29	B		1.0		B	U	34	17	B		1.0	34
MW-14	Potassium	ug/L	5,810	E		22	4,780	B		27		BE	UJ	4,820	4,400	BE	J	16	5,810
MW-14	Selenium	ug/L		B	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-14	Silver	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-14	Sodium	ug/L	26,600			36	34,900	E	J	20	35,200			89	37,200	E	J	76	37,200
MW-14	Thallium	ug/L		U	U	3.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-14	Vanadium	ug/L	1.1	B		1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.1
MW-14	Zinc	ug/L		B	U	10			U	24			U	30			U	22	30

Appendix C  
Maximum Concentrations of Inorganics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1			Event 2			Event 3			Event 4			Highest Detection
			Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	Result	LQ	DQ	
MW-36	Aluminum	ug/L		B	U	11			11			17			4,770
MW-36	Antimony	ug/L		U	U	1.0		U	1.0		U	2.0		U	2.0
MW-36	Arsenic	ug/L		U	U	2.0		U	3.4		U	2.0		B	3.4
MW-36	Barium	ug/L	140	B		1.0	145	B	1.0	160	B	1.0			242
MW-36	Beryllium	ug/L		U	U	1.0		U	1.0		U	1.0		U	1.0
MW-36	Cadmium	ug/L		U	U	1.0		U	1.0		U	1.0		U	1.0
MW-36	Calcium	ug/L	70,600			18	71,500		7.0	74,400	E	7.0	75,400	J	8.0
MW-36	Chromium (total)	ug/L		U	U	1.0	22		4.0	17		1.0	81		1.0
MW-36	Cobalt	ug/L	1.1	B		1.0	1.1	B	1.0	1.3	B	1.0	3.1	B	1.0
MW-36	Copper	ug/L		U	U	1.0	14	B	1.0	7.6	B	1.0	38	J	1.0
MW-36	Cyanide (total)	ug/L	NA					U	10		U	10		U	10
MW-36	Iron	ug/L	2,890			8.0	4,530		4.0	4,310		8.0	9,550		6.0
MW-36	Lead	ug/L		U	U	1.0	4.0		1.0	4.1		1.0	8.9		1.0
MW-36	Magnesium	ug/L	48,100			7.0	44,900		5.0	47,100		3.0	46,600	J	3.0
MW-36	Manganese	ug/L	145			1.0	114		1.0	72		1.0	122		1.0
MW-36	Mercury	ug/L		U	U	0.20		U	0.20		U	0.20		U	0.20
MW-36	Nickel	ug/L	12	B		1.0		B	18	14	B	1.0	68		1.0
MW-36	Potassium	ug/L	6,990	E		22	5,010	E	27	5,020		18	4,690	BE	16
MW-36	Selenium	ug/L		U	U	2.0		U	2.0		U	2.0		U	2.0
MW-36	Silver	ug/L		U	U	1.0		UN	1.0		U	1.0		U	1.0
MW-36	Sodium	ug/L	25,900			36	34,600		180	35,300		89	40,600	E	76
MW-36	Thallium	ug/L		U	U	3.0		U	3.0		U	2.0		U	2.0
MW-36	Vanadium	ug/L		U	U	1.0		U	1.0	1.1	B	1.0	3.3	B	1.0
MW-36	Zinc	ug/L		B	U	7.2		U	32	24		1.0		U	46
MW-37	Aluminum	ug/L	1,410			50		EN	633	664		17	1,210		NA
MW-37	Antimony	ug/L		U	U	2.0		U	1.0		U	2.0		U	1.0
MW-37	Arsenic	ug/L		U	U	1.0		U	2.0		U	2.0	2.5		NA
MW-37	Barium	ug/L	34	B		10	17	B	1.0	23	B	1.0	34		NA
MW-37	Beryllium	ug/L	0.30	B		0.20		U	1.0		U	1.0	1.0		NA
MW-37	Cadmium	ug/L	0.50	B		0.20		U	1.0		U	1.0		U	1.0
MW-37	Calcium	ug/L	34,300			1,000	32,700		7.0	27,400	E	7.0	85,600		NA
MW-37	Chromium (total)	ug/L		U	U	10	2.5	B	1.0	3.8	B	1.0	6.3		NA
MW-37	Cobalt	ug/L		U	U	10	4.4	B	1.0	5.1	B	1.0	5.6		NA
MW-37	Copper	ug/L		B	U	21		B	6.6	6.9	B	1.0	12		NA
MW-37	Cyanide (total)	ug/L	NA					U	10		U	10		U	10
MW-37	Iron	ug/L		*	U	1,240	1,850		4.0	2,140		8.0	9,665		NA
MW-37	Lead	ug/L		S	U	8.6	4.5		1.0		U	3.9		U	4.0
MW-37	Magnesium	ug/L	9,160			1,000	10,800		5.0	9,490		3.0	26,850		NA
MW-37	Manganese	ug/L	271	E*	J	10	165		1.0	154		1.0	694		NA
MW-37	Mercury	ug/L		acs	U	0.20		U	0.20		U	0.20		U	0.20
MW-37	Nickel	ug/L		U*	U	20	5.3	B	1.0	9.3	B	1.0	14		NA
MW-37	Potassium	ug/L	1,500	B		100	1,300	BE	27	1,050	B	18	2,025	J	NA
MW-37	Selenium	ug/L		U	U	2.0		U	2.0		U	2.0		U	2.0
MW-37	Silver	ug/L		U	U	10		U	1.0		U	1.0		U	1.0
MW-37	Sodium	ug/L	5,460			2,000		U	6,420	5,620		89	17,500		NA
MW-37	Thallium	ug/L		U	U	1.0		U	3.0		U	2.0		U	2.0
MW-37	Vanadium	ug/L		U	U	20	1.2	B	1.0	1.6	B	1.0	3.3		NA
MW-37	Zinc	ug/L		U	U	10		U	20		B	18		U	23
MW-38	Aluminum	ug/L		B	U	118	791		11	134	B	17	1,280		1,280
MW-38	Antimony	ug/L		U	U	2.0		U	1.0		U	2.0		U	1.0
MW-38	Arsenic	ug/L	3.9	B		1.0		B	5.6		U	2.0	5.3	B	2.0
MW-38	Barium	ug/L	37	B		10	28	B	1.0	33	BE	1.0	54	B	1.0

Appendix C  
Maximum Concentrations of Inorganics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-38	Beryllium	ug/L		UN	U	0.20		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-38	Cadmium	ug/L		U	U	0.20		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-38	Calcium	ug/L	63,500			1,000	30,600			7.0	54,900	E	J	7.0	57,800			8.0	63,500
MW-38	Chromium (total)	ug/L		U	U	10		U	U	4.0		B	U	4.2	8.8	B		12	12
MW-38	Cobalt	ug/L		U	U	10	2.1	B		1.0	7.1	B		1.0	2.4	B		1.0	10
MW-38	Copper	ug/L		B	U	12		B	U	12		B	U	10	14	B		1.0	14
MW-38	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-38	Iron	ug/L	6,440	*	J	20	12,800			4.0	1,940	E	J	8.0	16,200			6.0	16,200
MW-38	Lead	ug/L		U	U	1.5	8.3			1.0		B	U	1.1			U	10	10
MW-38	Magnesium	ug/L	22,000			1,000	10,100			5.0	19,400	E	J	3.0	20,500			3.0	22,000
MW-38	Manganese	ug/L	511	E*	J	10	250			1.0	1,270	E	J	1.0	594			1.0	1,270
MW-38	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-38	Nickel	ug/L		U	U	20		B	U	8.3	22	B		1.0	12	B		1.0	22
MW-38	Potassium	ug/L	494	B		100	BE	U	448	593	BE	J	18	959	BE	J	16	959	959
MW-38	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-38	Silver	ug/L		U	U	10		UN	R	1.0		U	U	1.0		U	U	1.0	10
MW-38	Sodium	ug/L	5,130			2,000	4,190	B		180	5,400	E	J	89		U		7,380	7,380
MW-38	Thallium	ug/L		U	U	1.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-38	Vanadium	ug/L		U	U	20	10	B		1.0	2.7	B		1.0	14	B		1.0	20
MW-38	Zinc	ug/L		U	U	10		B	U	20			U	73	56			1.0	73
MW-39	Aluminum	ug/L		U	U	273	520			11	153	B		17	366			10	520
MW-39	Antimony	ug/L		U	U	2.0		U	U	1.0		U	U	2.0		U	U	1.0	2.0
MW-39	Arsenic	ug/L	1.8	B		1.0		B	U	4.3		U	U	2.0		U	U	2.0	4.3
MW-39	Barium	ug/L	81	B		10	95	B		1.0	68	BE	J	1.0	78	B		1.0	95
MW-39	Beryllium	ug/L		U	U	0.20		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-39	Cadmium	ug/L		U	U	0.20		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-39	Calcium	ug/L	125,000			1,000	118,000			7.0	101,000	E	J	7.0	110,000			8.0	125,000
MW-39	Chromium (total)	ug/L		U	U	10	6.4	B		4.8		B	U	2.5	6.9	B		12	12
MW-39	Cobalt	ug/L		U	U	10	1.2	B		1.0		U	U	1.0		U	U	1.0	10
MW-39	Copper	ug/L		B	U	16		B	U	9.4		B	U	2.8		B	U	3.6	16
MW-39	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-39	Iron	ug/L	9,710	*	J	20	17,300			4.0	6,730	E	J	8.0	7,300			6.0	17,300
MW-39	Lead	ug/L		U	U	1.5	3.5			1.0		B	U	1.0		B	U	1.6	3.5
MW-39	Magnesium	ug/L	22,300			1,000	20,600			5.0	17,500	E	J	3.0	19,200			3.0	22,300
MW-39	Manganese	ug/L	1,060	E*	J	10	876			1.0	779	E	J	1.0	802			1.0	1,060
MW-39	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-39	Nickel	ug/L	712	*	J	20		B	U	7.4		B	U	3.1	7.3	B		1.0	712
MW-39	Potassium	ug/L	5,180			100	6,610	E	J	27	7,290	E	J	18	8,190	E	J	16	8,190
MW-39	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-39	Silver	ug/L		U	U	10		UN	R	1.0		U	U	1.0		U	U	1.0	10
MW-39	Sodium	ug/L	117,000			2,000	118,000			180	110,000	E	J	89	123,000			22	123,000
MW-39	Thallium	ug/L	1.0	B		1.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-39	Vanadium	ug/L		U	U	20	1.7	B		1.0		U	U	1.0		U	U	1.0	20
MW-39	Zinc	ug/L		U	U	10			U	36		B	U	10		B	U	13	36
MW-40	Aluminum	ug/L	406			50	2,040			11	941			17	1,325			NA	2,040
MW-40	Antimony	ug/L		U	U	2.0		U	U	1.0		U	U	2.0			U	1.0	2.0
MW-40	Arsenic	ug/L	1.3	B		1.0		B	U	3.8		U	U	2.0			U	2.0	3.8
MW-40	Barium	ug/L	26	B		10	27	B		1.0	24	B		1.0	26			NA	27
MW-40	Beryllium	ug/L	0.20	BN	J	0.20		U	U	1.0		U	U	1.0			U	1.0	1.0
MW-40	Cadmium	ug/L		U	U	0.20		U	U	1.0		U	U	1.0			U	1.0	1.0
MW-40	Calcium	ug/L	30,000			1,000	14,700			7.0	17,200			7.0	35,900			NA	35,900
MW-40	Chromium (total)	ug/L		U	U	10	4.1	B		4.0		B	U	5.7	4.4			NA	10

Appendix C  
Maximum Concentrations of Inorganics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection	
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit		
MW-40	Cobalt	ug/L		U	U	10	3.1		B		1.0	2.6	B		2.2			NA	10	
MW-40	Copper	ug/L		B	U	13			B	U	13		B	U	8.2	12		NA	13	
MW-40	Cyanide (total)	ug/L	NA						U	U	10		U	U	10		U	10	10	
MW-40	Iron	ug/L		*	UJ	1,190	3,470				4.0	3,060			8.0	4,120		NA	4,120	
MW-40	Lead	ug/L		U	U	11	7.3				1.0			U	4.6		U	6.6	11	
MW-40	Magnesium	ug/L	9,540			1,000	6,160				5.0			U	7,030	12,950		NA	12,950	
MW-40	Manganese	ug/L	852	E*	J	10	296				1.0	365			1.0	380		NA	852	
MW-40	Mercury	ug/L		U	U	0.20			U	U	0.20			U	U	0.20		U	0.20	
MW-40	Nickel	ug/L		U	U	20			B	U	10			B	U	7.2	7.5		NA	20
MW-40	Potassium	ug/L	1,280	B		100	1,270	BE	J	27			BE	UJ	1,030	1,700	J	NA	1,700	
MW-40	Selenium	ug/L		U	U	2.0			U	U	2.0			U	U	2.0		U	2.0	2.0
MW-40	Silver	ug/L		U	U	10			U	R	1.0			U	U	1.0		U	1.0	10
MW-40	Sodium	ug/L	4,120	B		2,000	7,800				180	3,320	B		89		U	5,255	7,800	
MW-40	Thallium	ug/L		U	U	1.0			U	U	3.0			U	U	2.0		U	2.0	3.0
MW-40	Vanadium	ug/L		U	U	20	4.3	B			1.0	3.1	B		1.0	6.7		NA	20	
MW-40	Zinc	ug/L		U	U	10				U	26			U	20		U	25	26	
MW-41	Aluminum	ug/L		B	U	90	1,040				11	401			NA	486			1,040	
MW-41	Antimony	ug/L		U	U	2.0			U	U	1.0			U	2.0		U	U	1.0	2.0
MW-41	Arsenic	ug/L		U	U	1.0			B	U	3.0			U	2.0		U	U	2.0	3.0
MW-41	Barium	ug/L	19	B		10	31	B			1.0	18	J		NA	28	B		1.0	31
MW-41	Beryllium	ug/L		UN	UJ	0.20			U	U	1.0			U	1.0		U	U	1.0	1.0
MW-41	Cadmium	ug/L		U	U	0.20			U	U	1.0			U	1.0		U	U	1.0	1.0
MW-41	Calcium	ug/L	44,000			1,000	36,200				7.0	33,450	J		NA	55,200		8.0	55,200	
MW-41	Chromium (total)	ug/L		U	U	10	6.8	B			4.0			U	7.1	7.0	B		1.0	10
MW-41	Cobalt	ug/L		U	U	10			U	U	1.0			U	1.0	1.3	B		1.0	10
MW-41	Copper	ug/L		B	U	11	16	B			1.0			UJ	7.4	12	B		1.0	16
MW-41	Cyanide (total)	ug/L	NA						U	U	10			U	10		U	U	10	10
MW-41	Iron	ug/L		*	UJ	1,670	1,170				4.0	518	J		NA	861		6.0	1,670	
MW-41	Lead	ug/L		U	U	13	13				1.0	7.8	J		NA	3.2			1.0	13
MW-41	Magnesium	ug/L	13,300			1,000	11,300				5.0	11,100	J		NA	18,500		3.0	18,500	
MW-41	Manganese	ug/L	414	E*	J	10	324				1.0	107	J		NA	280		1.0	414	
MW-41	Mercury	ug/L		U	U	0.20			U	U	0.20			U	0.20		U	U	0.20	0.20
MW-41	Nickel	ug/L		U	U	20			B	U	6.9			U	6.0	7.8	B		1.0	20
MW-41	Potassium	ug/L	331	B		100		BE	UJ	597	386		J		NA	964	BE	J	16	964
MW-41	Selenium	ug/L		U	U	2.0			U	U	2.0			U	2.0		U	U	2.0	2.0
MW-41	Silver	ug/L		U	U	10			UN	R	1.0			U	1.0		U	U	1.0	10
MW-41	Sodium	ug/L	1,400	B		2,000	5,950				180	2,745	J		NA		B	UJ	9,560	9,560
MW-41	Thallium	ug/L		U	U	1.0			U	U	3.0			U	2.0		B	U	2.4	3.0
MW-41	Vanadium	ug/L		U	U	20	3.0	B			1.0	1.3			NA	1.3	B		1.0	20
MW-41	Zinc	ug/L		U	U	10				U	32			UJ	28			U	30	32
MW-42	Aluminum	ug/L	NR			50	752				11	710			NA	1,880			10	1,880
MW-42	Antimony	ug/L		U	U	2.0			U	U	1.0			U	2.0		U	U	1.0	2.0
MW-42	Arsenic	ug/L	2.1	B		1.0	15				2.0	7.9			NA	13			2.0	15
MW-42	Barium	ug/L	90	B		10	83	B			1.0	71	J		NA	97	B		1.0	97
MW-42	Beryllium	ug/L		UN	UJ	0.20			U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Cadmium	ug/L		U	U	0.20			U	U	1.0			U	1.0		U	U	1.0	1.0
MW-42	Calcium	ug/L	139,000			1,000	133,000				7.0	105,000	J		NA	118,000		8.0	139,000	
MW-42	Chromium (total)	ug/L		U	U	10	4.9	B			1.0			U	8.3	15			12	15
MW-42	Cobalt	ug/L		U	U	10	1.8	B			1.0	1.8			NA	2.5	B		1.0	10
MW-42	Copper	ug/L		B	U	17	19	B			1.0			U	11	22	B		1.0	22
MW-42	Cyanide (total)	ug/L	NA						U	U	10			U	10		U	U	10	10
MW-42	Iron	ug/L		*	UJ	1,340	9,920	N	J		4.0	6,630	J		NA	11,100		6.0	11,100	

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-42	Lead	ug/L		S	U	5.7	2.8	B		1.0		U		2.6			U	5.7	5.7
MW-42	Magnesium	ug/L	49,800			1,000	49,000			5.0	38,850		J	NA	44,400			3.0	49,800
MW-42	Manganese	ug/L	928	E*	J	10	796			1.0	598		J	NA	697			1.0	928
MW-42	Mercury	ug/L		U	U	0.20		U	U	0.20			U	0.20		U	U	0.20	0.20
MW-42	Nickel	ug/L		U	U	20	6.6	B		1.0			U	8.6	12	B		1.0	20
MW-42	Potassium	ug/L	1,700	B		100	1,380	B		27	1,535		J	NA	2,350	BE	J	16	2,350
MW-42	Selenium	ug/L		U	U	2.0		U	U	2.0			U	2.0		U	U	2.0	2.0
MW-42	Silver	ug/L		U	U	10		U	U	1.0			U	1.0		U	U	1.0	10
MW-42	Sodium	ug/L	12,700			2,000	14,700	E	J	20	11,550		J	NA	18,000			22	18,000
MW-42	Thallium	ug/L		U	U	1.0		U	U	3.0			U	2.0		U	U	2.0	3.0
MW-42	Vanadium	ug/L		U	U	20	2.2	B		1.0	1.8			NA	4.0	B		1.0	20
MW-42	Zinc	ug/L		U	U	10		B	U	20			U	18			U	30	30
MW-43	Aluminum	ug/L	2,920			50	10,100			11	4,270			17	12,700			10	12,700
MW-43	Antimony	ug/L		U	U	2.0		U	U	1.0			U	2.0		U	U	1.0	2.0
MW-43	Arsenic	ug/L	18	S		1.0	35			2.0	31			2.0	81			2.0	81
MW-43	Barium	ug/L	63	B		10	88	B		1.0	81	BE	J	1.0	128	B		1.0	128
MW-43	Beryllium	ug/L		U	U	0.20		U	U	1.0			U	1.0	1.5	B		1.0	1.5
MW-43	Cadmium	ug/L		U	U	0.20		U	U	1.0			U	1.0	1.3	B		1.0	1.3
MW-43	Calcium	ug/L	115,000			1,000	128,000			7.0	123,000	E	J	7.0	134,000			8.0	134,000
MW-43	Chromium (total)	ug/L	36			10	26			1.0	26			1.0	95			12	95
MW-43	Cobalt	ug/L		U	U	10	13	B		1.0	8.0	B		1.0	20	B		1.0	20
MW-43	Copper	ug/L		U	U	39	45			1.0	39			1.0	75			1.0	75
MW-43	Cyanide (total)	ug/L	NA					U	U	10			U	10		U	U	10	10
MW-43	Iron	ug/L	13,900	*	J	20	29,300	N	J	4.0	22,200	E	J	8.0	47,500			6.0	47,500
MW-43	Lead	ug/L		S	U	7.5	21			1.0	16			1.0	33			1.0	33
MW-43	Magnesium	ug/L	48,100			1,000	55,000			5.0	55,400	E	J	3.0	63,600			3.0	63,600
MW-43	Manganese	ug/L	374	E*	J	10	666			1.0	586	E	J	1.0	857			1.0	857
MW-43	Mercury	ug/L		U	U	0.20		U	U	0.20			U	0.20		U	U	0.20	0.20
MW-43	Nickel	ug/L		B*	UJ	27	29	B		1.0	23	B		1.0	82			1.0	82
MW-43	Potassium	ug/L	1,800	B		100	4,230	B		27	2,770	BE	J	18	5,610	E	J	16	5,610
MW-43	Selenium	ug/L		US	U	2.0		U	U	2.0			U	2.0	2.1	B		2.0	2.1
MW-43	Silver	ug/L		U	U	10		U	U	1.0			U	1.0		U	U	1.0	10
MW-43	Sodium	ug/L	10,100			2,000	9,210	E	J	20	10,300	E	J	89			U	13,100	13,100
MW-43	Thallium	ug/L		U	U	1.0		U	U	3.0			U	2.0		U	U	2.0	3.0
MW-43	Vanadium	ug/L		U	U	20	25	B		1.0	13	B		1.0	31	B		1.0	31
MW-43	Zinc	ug/L		U	U	29			U	68			U	57	104			1.0	104
MW-44	Aluminum	ug/L		B		175	381			NA	1,710			17	457			10	1,710
MW-44	Antimony	ug/L		U	U	2.0			U	1.1			U	2.0		U	U	1.0	2.0
MW-44	Arsenic	ug/L	6.0	BS		1.0	11			NA	41			2.0	11			2.0	41
MW-44	Barium	ug/L	106	B		10	119			NA	150	BE	J	1.0	112	B		1.0	150
MW-44	Beryllium	ug/L		U	U	0.20			U	1.0			U	1.0		U	U	1.0	1.0
MW-44	Cadmium	ug/L		U	U	0.20			U	1.0			U	1.0		U	U	1.0	1.0
MW-44	Calcium	ug/L	90,500			1,000	94,000			NA	85,700	E	J	7.0	83,300			8.0	94,000
MW-44	Chromium (total)	ug/L		U	U	10	2.2			NA	31			1.0		B	U	4.0	31
MW-44	Cobalt	ug/L		U	U	10			U	1.0	2.5	B		1.0		U	U	1.0	10
MW-44	Copper	ug/L		B	U	16	4.4			NA	27			1.0	3.9	B		1.0	27
MW-44	Cyanide (total)	ug/L	NA					U		10			U	10		U	U	10	10
MW-44	Iron	ug/L		*	UJ	1,400	2,280		J	NA	14,700	E	J	8.0	2,510			6.0	14,700
MW-44	Lead	ug/L		U	U	1.5	1.3			NA			U	1.0		U	U	1.0	1.5
MW-44	Magnesium	ug/L	37,200			1,000	38,450			NA	36,100	E	J	3.0	34,500			3.0	38,450
MW-44	Manganese	ug/L	39	E*	J	10	47			NA	108	E	J	1.0	44			1.0	108
MW-44	Mercury	ug/L		U	U	0.20			U	0.20			U	0.20		U	U	0.20	0.20

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-44	Nickel	ug/L		B*	UJ	23	3.9			NA	18	B		1.0		B	U	3.6	23
MW-44	Potassium	ug/L	9K1	B		100	1,285			NA	2,040	BE	J	18	1,370	BE	J	16	2,040
MW-44	Selenium	ug/L		U	U	2.0			U	2.0		U	U	2.0		U	U	2.0	2.0
MW-44	Silver	ug/L		U	U	10			U	1.0		U	U	1.0		U	U	1.0	10
MW-44	Sodium	ug/L	19,700			2,000	20,000		J	NA	17,400	E	J	89	18,900	E	J	76	20,000
MW-44	Thallium	ug/L		U	U	1.0			U	3.0		U	U	2.0		U	U	2.0	3.0
MW-44	Vanadium	ug/L		U	U	20			U	1.0	3.9	B		1.0		U	U	1.0	20
MW-44	Zinc	ug/L		U	U	10			U	10		U	U	28		B	U	12	28
MW-45	Aluminum	ug/L	776			50	148			11		B	U	183		B	U	100	776
MW-45	Antimony	ug/L		U	U	2.0	1.2			1.0		U	U	2.0		U	U	1.0	2.0
MW-45	Arsenic	ug/L	22			1.0	17			2.0	24			2.0	44			2.0	44
MW-45	Barium	ug/L	85	B		10	117			1.0	85	B		1.0	110	B		1.0	117
MW-45	Beryllium	ug/L		U	U	0.20			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-45	Cadmium	ug/L		U	U	0.20			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-45	Calcium	ug/L	97,100			1,000	120,000			7.0	89,100			7.0	112,000			8.0	120,000
MW-45	Chromium (total)	ug/L	29			10	12			1.0		B	U	5.0		B	U	3.0	29
MW-45	Cobalt	ug/L		U	U	10	4.2			1.0	2.9	B		1.0	3.4	B		1.0	10
MW-45	Copper	ug/L		B	U	21	48			1.0		B	U	4.4	9.1	B		1.0	48
MW-45	Cyanide (total)	ug/L	NA						U	10		U	U	10		U	U	10	10
MW-45	Iron	ug/L	9,570	*	J	20	11,400			14	10,100			8.0	15,900			6.0	15,900
MW-45	Lead	ug/L	39	S		1.5			U	1.0	12			1.0	8.8			1.0	39
MW-45	Magnesium	ug/L	27,500			1,000	322,000			5.0	23,200			3.0	28,400			3.0	322,000
MW-45	Manganese	ug/L	641	E*	J	10	688			1.0	416			1.0	480			1.0	688
MW-45	Mercury	ug/L		U	U	0.20			U	0.20		U	U	0.20		U	U	0.20	0.20
MW-45	Nickel	ug/L		B*	UJ	35	16			1.0		B	U	7.6	9.5	B		1.0	35
MW-45	Potassium	ug/L	5,140			100	7,230		J	27		E	UJ	6,900	8,350	E	J	16	8,350
MW-45	Selenium	ug/L		U	U	2.0			U	2.0		U	U	2.0		U	U	2.0	2.0
MW-45	Silver	ug/L		U	U	10			U	1.0		U	U	1.0		U	U	1.0	10
MW-45	Sodium	ug/L	70,900			2,000	101,000		J	180	79,000			89	101,000	E	J	76	101,000
MW-45	Thallium	ug/L		U	U	1.0			U	3.0		U	U	2.0		U	U	2.0	3.0
MW-45	Vanadium	ug/L		U	U	20			U	1.0		U	U	1.0		U	U	1.0	20
MW-45	Zinc	ug/L		B		15			U	12			UJ	21		B	U	16	21
MW-46	Aluminum	ug/L	821			50		EN	J	441	544			17		B	U	186	821
MW-46	Antimony	ug/L		U	U	2.0			U	1.0		U	U	2.0		U	U	1.0	2.0
MW-46	Arsenic	ug/L	3.7	B		1.0	2.1	B		2.0	3.7	B		2.0	2.8	B		2.0	3.7
MW-46	Barium	ug/L	132	B		10	129	B		1.0	110	B		1.0	126	B		1.0	132
MW-46	Beryllium	ug/L		U	U	0.20			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-46	Cadmium	ug/L		U	U	0.20	1.1	B		1.0		U	U	1.0		U	U	1.0	1.1
MW-46	Calcium	ug/L	115,000			1,000	114,000			7.0	112,000	E	J	7.0	115,000			8.0	115,000
MW-46	Chromium (total)	ug/L		U	U	10	5.3	B		1.0	4.1	B		1.0	1.9	B		12	12
MW-46	Cobalt	ug/L		U	U	10	1.8	B		1.0	2.0	B		1.0		U	U	1.0	10
MW-46	Copper	ug/L		B		13			B	3.2	4.9	B		1.0		B	U	2.6	13
MW-46	Cyanide (total)	ug/L	NA						U	10		U	U	10		U	U	10	10
MW-46	Iron	ug/L	21,700	*	J	20	17,800			4.0	21,000			8.0	19,000			6.0	21,700
MW-46	Lead	ug/L		S	U	5.0			U	1.0			U	3.0		B	U	1.6	5.0
MW-46	Magnesium	ug/L	30,500			1,000	32,400			5.0	29,700			3.0	30,900			3.0	32,400
MW-46	Manganese	ug/L	1,510	E*	J	10	1,350			1.0	1,390			1.0	1,390			1.0	1,510
MW-46	Mercury	ug/L		U	U	0.20			U	0.20		U	U	0.20		U	U	0.20	0.20
MW-46	Nickel	ug/L		U*	UJ	20	5.4	B		1.0	4.7	B		1.0	4.4	B		1.0	20
MW-46	Potassium	ug/L	1,450	B		100	1,280	BE	J	27	1,300	B		18	1,190	BE	J	16	1,450
MW-46	Selenium	ug/L		U	U	2.0			U	2.0		U	U	2.0		U	U	2.0	2.0
MW-46	Silver	ug/L		U	U	10			U	1.0		U	U	1.0		U	U	1.0	10

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**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-46	Sodium	ug/L	62,300			2,000	74,900			185	58,600			89	70,000			22	74,900
MW-46	Thallium	ug/L		U	U	1.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-46	Vanadium	ug/L		U	U	20	1.5	B		1.0	2.8	B		1.0		U	U	1.0	20
MW-46	Zinc	ug/L		U	U	10		B	U	19		B	U	16		B	U	12	19
MW-47	Aluminum	ug/L	430			NA	533			11	1,630			17	724	N	J	NA	1,630
MW-47	Antimony	ug/L			U	2.0		U	U	1.0		U	U	2.0	1.2	B	U	NA	2.0
MW-47	Arsenic	ug/L			U	1.0		U	U	2.0		U	U	2.0		U		2.0	2.0
MW-47	Barium	ug/L			U	10	8.2	B		1.0	12	B		1.0	13	B		NA	13
MW-47	Beryllium	ug/L			U	0.20		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	Cadmium	ug/L	0.20			NA		U	U	1.0		U	U	1.0		U		1.0	1.0
MW-47	Calcium	ug/L	8,710			NA	7,330			7.0	6,130			7.0	13,700			NA	13,700
MW-47	Chromium (total)	ug/L			U	10	2.3	B		1.0		B	U	6.8	2.1	B	U	NA	10
MW-47	Cobalt	ug/L			U	10		U	U	1.0	1.3	B		1.0	1.7	B		NA	10
MW-47	Copper	ug/L			U	15		B	U	3.0		B	U	8.0	6.0	B		NA	15
MW-47	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U		10	10
MW-47	Iron	ug/L			U	300	405			14	1,130			8.0	569			NA	1,130
MW-47	Lead	ug/L	23			NA	2.3	B		1.0	12			1.0	8.3			NA	23
MW-47	Magnesium	ug/L	2,685			NA	2,070	B		5.0		B	U	1,950	3,990	B		NA	3,990
MW-47	Manganese	ug/L	27		J	NA	8.3	B		1.0	16			1.0	17			NA	27
MW-47	Mercury	ug/L			U	0.20		U	U	0.20		U	U	0.20		U		0.20	0.20
MW-47	Nickel	ug/L			U	20	1.3	B		1.0		B	U	4.8	3.4	B		NA	20
MW-47	Potassium	ug/L	1,130			NA	590	BE	J	27		BE	U	1,050	959	BE	J	NA	1,130
MW-47	Selenium	ug/L			U	2.0		U	U	2.0		U	U	2.0		U		2.0	2.0
MW-47	Silver	ug/L			U	10		U	U	1.0		U	U	1.0		U		1.0	10
MW-47	Sodium	ug/L	3,560			NA	2,120	B		180	1,780	B		89	6,750		U	NA	6,750
MW-47	Thallium	ug/L			U	1.0		U	U	3.0		U	U	2.0	4.3	B	U	NA	4.3
MW-47	Vanadium	ug/L			U	20		U	U	1.0	3.5	B		1.0	1.9	B		NA	20
MW-47	Zinc	ug/L			U	10		B	U	17			U	42	20	B	U	NA	42
MW-48	Aluminum	ug/L		U	U	254		B	U	46		B	U	146	330			10	330
MW-48	Antimony	ug/L		U	U	2.0	1.5	B		1.0		U	U	2.0		U	U	1.0	2.0
MW-48	Arsenic	ug/L	11			1.0	6.4	B		2.0	9.4	B		2.0	13			2.0	13
MW-48	Barium	ug/L	160	B		10	125	B		1.0	125	B		1.0	141	B		1.0	160
MW-48	Beryllium	ug/L		U	U	0.20		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Cadmium	ug/L		U	U	0.20		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW-48	Calcium	ug/L	142,000			1,000	133,000			7.0	107,000			7.0	107,000			8.0	142,000
MW-48	Chromium (total)	ug/L			U	10	1.9	B		1.0		B	U	3.9	7.8	B		1.0	10
MW-48	Cobalt	ug/L			U	10	2.6	B		1.0	3.3	B		1.0	3.5	B		1.0	10
MW-48	Copper	ug/L		B	U	14		U	U	1.0		B	U	4.8	13	B		1.0	14
MW-48	Cyanide (total)	ug/L	NA					U	U	10		U	U	10		U	U	10	10
MW-48	Iron	ug/L	30,800	*	J	30	24,900			14	23,300			8.0	24,500			6.0	30,800
MW-48	Lead	ug/L		S	U	2.4		U	U	1.0		B	U	2.5	7.7			1.0	7.7
MW-48	Magnesium	ug/L	20,100			1,000	19,600			5.0	14,300			3.0	15,100			3.0	20,100
MW-48	Manganese	ug/L	688	E*	J	10	618			1.0	504			1.0	504			1.0	688
MW-48	Mercury	ug/L				0.20		U	U	0.20		U	U	0.20		U	U	0.20	0.20
MW-48	Nickel	ug/L		U*	U	20	14	B		1.0		B	U	16	19	B		1.0	20
MW-48	Potassium	ug/L	7,560	B		100	6,860	E	J	27		E	U	8,470	8,270	E	J	16	8,470
MW-48	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW-48	Silver	ug/L			U	10		U	U	1.0		U	U	1.0		U	U	1.0	10
MW-48	Sodium	ug/L	52,100			2,000	46,300			180	43,000			89	42,700	E	J	76	52,100
MW-48	Thallium	ug/L	1.1	B		1.0	4.0	B		3.0		U	U	2.0		U	U	2.0	4.0
MW-48	Vanadium	ug/L			U	20	2.4	B		1.0	1.6	B		1.0	1.6	B		1.0	20
MW-48	Zinc	ug/L			U	10		B	U	6.2			U	26			U	53	53



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American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-49	Aluminum	ug/L			U	16	258			11	285			NA	1,070		J	NA	1,070
MW-49	Antimony	ug/L			U	2.0	2.0	B		1.0			U	2.0			U	1.0	2.0
MW-49	Arsenic	ug/L	25			NA	11			2.0	27			NA	38			NA	38
MW-49	Barium	ug/L	98			NA	56	B		1.0	128		J	NA	135			NA	135
MW-49	Beryllium	ug/L			U	0.20		U	U	1.0			U	1.0	1.1			NA	1.1
MW-49	Cadmium	ug/L			U	0.20		U	U	1.0			U	1.0			U	1.0	1.0
MW-49	Calcium	ug/L	81,050			NA	50,700			7.0	94,600		J	NA	82,300		J	NA	94,600
MW-49	Chromium (total)	ug/L			U	10	2.2	B		1.0			U	4.2	11			NA	11
MW-49	Cobalt	ug/L			U	10	2.4	B		1.0	2.4			NA	1.6			NA	10
MW-49	Copper	ug/L			U	12		B	U	2.6			U	4.9	9.4		J	NA	12
MW-49	Cyanide (total)	ug/L	NA					U	U	10			U	10			U	10	10
MW-49	Iron	ug/L	20,100		J	NA	9,850			14	27,250		J	NA	28,700			NA	28,700
MW-49	Lead	ug/L			U	1.5	1.2	B		1.0	4.4			NA	3.8			NA	4.4
MW-49	Magnesium	ug/L	10,600			NA	7,200			5.0	11,800		J	NA	10,340		J	NA	11,800
MW-49	Manganese	ug/L	1,975		J	NA	810			1.0	2,160		J	NA	2,330			NA	2,330
MW-49	Mercury	ug/L			U	0.20		U	U	0.20			U	0.20			U	0.20	0.20
MW-49	Nickel	ug/L			UJ	21	9.7	B		1.0	14			NA	13			NA	21
MW-49	Potassium	ug/L	1,700			NA	1,600	E	J	27	5,300		J	NA	5,900		J	NA	5,900
MW-49	Selenium	ug/L			U	2.0		U	U	2.0			U	2.0			U	2.0	2.0
MW-49	Silver	ug/L			U	10		U	U	1.0			U	1.0			U	1.0	10
MW-49	Sodium	ug/L	20,950			NA	12,300	E	J	180	29,650		J	NA	26,900		J	NA	29,650
MW-49	Thallium	ug/L			U	1.0		U	U	3.0			U	2.0			U	2.0	3.0
MW-49	Vanadium	ug/L			U	20		U	U	1.0			U	1.0	1.9			NA	20
MW-49	Zinc	ug/L			U	10		U		30			UJ	60			U	39	60
MW-50	Aluminum	ug/L	813			NA	8,320			11	2,780			17	12,000	N	J	NA	12,000
MW-50	Antimony	ug/L			U	1.0			U	1.0			U	2.0	1.0	N	J	NA	2.0
MW-50	Arsenic	ug/L	27	B		NA			U	7.7			U	2.0	6.8	B		NA	7.7
MW-50	Barium	ug/L	236			NA	314			1.0	232			1.0	285			NA	314
MW-50	Beryllium	ug/L			U	1.0			U	1.0	1.1	B		1.0			U	1.0	1.1
MW-50	Cadmium	ug/L			U	1.0			U	1.0			U	1.0			U	1.0	1.0
MW-50	Calcium	ug/L	126,000			NA	191,000			7.0	131,000	E	J	7.0	191,000			NA	191,000
MW-50	Chromium (total)	ug/L			B	U	5.0	18		1.0	6.6	B		1.0	130			NA	130
MW-50	Cobalt	ug/L	1.1	B		NA	7.3			1.0	2.9	B		1.0	12	B		NA	12
MW-50	Copper	ug/L			B	U	1.8	41		1.0	9.1	B		1.0	36			NA	41
MW-50	Cyanide (total)	ug/L			U	U	10		U	10			U	10			U	10	10
MW-50	Iron	ug/L	2,760			NA	14,300		J	4.0	5,460			8.0	20,200			NA	20,200
MW-50	Lead	ug/L	3.9		J	NA	8.9			1.0			U	4.3	14			NA	14
MW-50	Magnesium	ug/L	62,700			NA	87,800			5.0	63,300			3.0	87,800			NA	87,800
MW-50	Manganese	ug/L	77			NA	280			1.0	112			1.0	408			NA	408
MW-50	Mercury	ug/L			U	U	0.20		U	0.20			U	0.20			U	0.20	0.20
MW-50	Nickel	ug/L	11	B		NA	27			1.0	9.1	B		1.0	105			NA	105
MW-50	Potassium	ug/L	17,500			NA	21,200			27	17,000			18	21,000	E	J	NA	21,200
MW-50	Selenium	ug/L			U	U	2.0		U	2.0			U	2.0			U	2.0	2.0
MW-50	Silver	ug/L			U	U	1.0		U	1.0			U	1.0			U	1.0	1.0
MW-50	Sodium	ug/L	353,000			NA	368,000		J	20	280,000			890	481,000			NA	481,000
MW-50	Thallium	ug/L	2.1	B		NA			U	3.0			U	2.0	2.2	B	U	NA	3.0
MW-50	Vanadium	ug/L	1.5	B		NA	14			1.0	4.6	B		1.0	19	B		NA	19
MW-50	Zinc	ug/L			U	30	45			45			B	U	57			NA	57
MW-51	Aluminum	ug/L	618			NA	403			11	362			17	1,040	N	J	10	1,040
MW-51	Antimony	ug/L			U	1.0			U	1.0			U	2.0			U	1.0	2.0
MW-51	Arsenic	ug/L	3.9			NA			B	3.6			U	2.0			U	2.0	3.9
MW-51	Barium	ug/L	412			NA	455			1.0	386	E	J	1.0	397			1.0	455

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Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW 51	Beryllium	ug/L			U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW 51	Cadmium	ug/L			U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW 51	Calcium	ug/L	147,000			NA	153,000			7.0	137,000	E	J	7.0	138,000			8.0	153,000
MW 51	Chromium (total)	ug/L			U	3.1	3.7	B		1.0		B	U	4.6	7.5	B		1.0	7.5
MW 51	Cobalt	ug/L	1.6			NA	1.4	B		1.0	1.2	B		1.0	2.3	B		1.0	2.3
MW 51	Copper	ug/L			U	2.4	4.5	B		1.0		B	U	4.4	6.7	B		1.0	6.7
MW 51	Cyanide (total)	ug/L			U	10		U	U	10		U	U	10		U	U	10	10
MW 51	Iron	ug/L	7,715			NA	8,470	N	J	4.0	6,590	E	J	8.0	8,660			6.0	8,660
MW 51	Lead	ug/L	2.5		J	NA	2.6	B		1.0		B	U	2.1			U	3.9	3.9
MW 51	Magnesium	ug/L	66,800			NA	67,600			5.0	61,800	E	J	3.0	61,600			3.0	67,600
MW 51	Manganese	ug/L	173			NA	118			1.0	89	E	J	1.0	128			1.0	173
MW 51	Mercury	ug/L			U	0.20		U	U	0.20		U	U	0.20			U	0.20	0.20
MW 51	Nickel	ug/L	11			NA	8.0	B		1.0		B	U	5.9	11	B		1.0	11
MW 51	Potassium	ug/L	4,495			NA	3,450	B		27	3,710	BE	J	18	3,880	BE	J	16	4,495
MW 51	Selenium	ug/L			U	2.0		U	U	2.0		U	U	2.0		U	U	2.0	2.0
MW 51	Silver	ug/L			U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW 51	Sodium	ug/L	104,500			NA	114,000	E	J	20	103,000	E	J	89	108,000	E	J	76	114,000
MW 51	Thallium	ug/L			U	2.0		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW 51	Vanadium	ug/L	1.8		J	NA		U	U	1.0		U	U	1.0	1.8	B		1.0	1.8
MW 51	Zinc	ug/L			U	17		B	U	14		B	U	12		B	U	19	19
MW 52	Aluminum	ug/L	4,190	N*	J	NA	1,030			11	1,360			17	750			10	4,190
MW 52	Antimony	ug/L	6.8	B		NA		U	U	1.0		U	U	2.0		U	U	1.0	6.8
MW 52	Arsenic	ug/L	40			NA	125			2.0	71			2.0	42			2.0	125
MW 52	Barium	ug/L	264			NA	369			1.0	308	E	J	1.0	321			1.0	369
MW 52	Beryllium	ug/L	1.2	B		NA		U	U	1.0		U	U	1.0	1.1	B		1.0	1.2
MW 52	Cadmium	ug/L		U	U	1.0		U	U	1.0		U	U	1.0		U	U	1.0	1.0
MW 52	Calcium	ug/L	135,000			NA	139,000			7.0	113,000	E	J	7.0	114,000			8.0	139,000
MW 52	Chromium (total)	ug/L	134			NA	248			4.0	15			1.0	9.3	B		12	248
MW 52	Cobalt	ug/L	13	B		NA	8.3	B		1.0	2.8	B		1.0	2.1	B		1.0	13
MW 52	Copper	ug/L	67			NA	23	B		1.0		B	U	7.6	10	B		1.0	67
MW 52	Cyanide (total)	ug/L		U	U	10		U	U	10		U	U	10		U	U	10	10
MW 52	Iron	ug/L	11,600			NA	9,320			4.0	6,820	E	J	8.0	5,340			6.0	11,600
MW 52	Lead	ug/L	11			NA	8.9			1.0		U	U	1.0			U	4.1	11
MW 52	Magnesium	ug/L	49,100			NA	52,800			5.0	43,300	E	J	3.0	44,100			3.0	52,800
MW 52	Manganese	ug/L	673			NA	378			1.0	222	E	J	1.0	207			1.0	673
MW 52	Mercury	ug/L		U	U	0.20		U	U	0.20		U	U	0.20			U	0.20	0.20
MW 52	Nickel	ug/L	201			NA	124			1.0	17	B		1.0	12	B		1.0	201
MW 52	Potassium	ug/L	7,770	E	J	NA	4,120	BE	J	27	3,990	BE	J	18	3,640	BE	J	16	7,770
MW 52	Selenium	ug/L		U	U	2.0		U	U	2.0		U	U	2.0	2.1	B		2.0	2.1
MW 52	Silver	ug/L		U	U	1.0		UN	R	1.0		U	U	1.0		U	U	1.0	1.0
MW 52	Sodium	ug/L	87,900			NA	152,000			180	138,000	E	J	89	145,000			22	152,000
MW 52	Thallium	ug/L	4.1	B		NA		U	U	3.0		U	U	2.0		U	U	2.0	4.1
MW 52	Vanadium	ug/L	11	B		NA	2.8	B		1.0	2.9	B		1.0	1.8	B		1.0	11
MW 52	Zinc	ug/L	90			NA			U	28			U	21			U	22	90
MW 53	Aluminum	ug/L	39,200	N*	J	NA	265			11	15,000			17	7,490			10	39,200
MW 53	Antimony	ug/L		B	U	1.7		U		1.2	3.3	B		2.0	1.6	B		1.0	3.3
MW 53	Arsenic	ug/L	10			NA			U	7.0	8.9	B		2.0	10			2.0	30
MW 53	Barium	ug/L	997			NA	1,410			1.0	1,620			1.0	1,520			1.0	1,620
MW 53	Beryllium	ug/L	6.2			NA			U	1.0	1.9	B		1.0	1.8	B		1.0	6.2
MW 53	Cadmium	ug/L		U	U	1.0			U	1.0		U	U	1.0			U	1.0	1.0
MW 53	Calcium	ug/L	160,000			NA	222,000			7.0	258,000	E	J	7.0	230,000			8.0	258,000
MW 53	Chromium (total)	ug/L	189			NA			U	4.0	102			1.0	58			1.0	189

Appendix C  
Maximum Concentrations of Inorganics  
Baseline Groundwater Monitoring  
American Chemical Services NPL Site  
Griffith, Indiana

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-53	Cobalt	ug/L	25	B		NA	5.2			1.0	8.6	B		1.0	6.6	B		1.0	25
MW-53	Copper	ug/L	107			NA			U	3.9	49			1.0	40	B		1.0	107
MW-53	Cyanide (total)	ug/L		U	U	10			U	10		U	U	10		U	U	10	10
MW-53	Iron	ug/L	48,800			NA	21,300			4.0	32,700			8.0	27,400			6.0	48,800
MW-53	Lead	ug/L	138			NA	1.1			1.0	24			1.0	17			1.0	138
MW-53	Magnesium	ug/L	75,300			NA	108,000			5.0	117,000			3.0	102,000			3.0	117,000
MW-53	Manganese	ug/L	1,630			NA	321			1.0	521			1.0	417			1.0	1,630
MW-53	Mercury	ug/L	0.24			NA			U	0.20		U	U	0.20		U	U	0.20	0.24
MW-53	Nickel	ug/L	139			NA			U	38	93			1.0	62			1.0	139
MW-53	Potassium	ug/L	24,400	E	J	NA	28,800		J	27	33,200			18	29,000	E	J	16	33,200
MW-53	Selenium	ug/L			U	5.1			U	2.0		U	U	2.0		U	U	2.0	5.1
MW-53	Silver	ug/L		U	U	1.0			R	1.0		U	U	1.0		U	U	1.0	1.0
MW-53	Sodium	ug/L	252,000			NA	342,000			180	404,000			890	380,000			110	404,000
MW-53	Thallium	ug/L	2.0	B		NA			U	3.0		U	U	2.0		U	U	2.0	3.0
MW-53	Vanadium	ug/L	32	B		NA			U	1.0	7.8	B		1.0	4.1	B		1.0	32
MW-53	Zinc	ug/L	443			NA			U	27	109			1.0	79			1.0	443
MW-54	Aluminum	ug/L	853	N*	J	NA	1,340	EN	J	11	1,860			17	1,980	N	J	10	1,980
MW-54	Antimony	ug/L		B	U	3.2			U	1.0		U	U	2.0		U	U	1.0	3.2
MW-54	Arsenic	ug/L	7.5	B		NA	9.8	B		2.0	5.3	B		2.0	4.7	B		2.0	10
MW-54	Barium	ug/L	190	B		NA	145	B		1.0	149	BE	J	1.0	153	B		1.0	190
MW-54	Beryllium	ug/L		U	U	1.0			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Cadmium	ug/L		U	U	1.0			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Calcium	ug/L	132,000			NA	113,000			7.0	123,000	E	J	7.0	126,000		J	8.0	132,000
MW-54	Chromium (total)	ug/L	82			NA	12			1.0	24			1.0	46			1.0	82
MW-54	Cobalt	ug/L	4.0	B		NA	2.3	B		1.0	1.8	B		1.0	3.2	B		1.0	4.0
MW-54	Copper	ug/L	60			NA	51			1.0	42			1.0	39		J	1.0	60
MW-54	Cyanide (total)	ug/L		U	U	10			U	10		U	U	10		U	U	10	10
MW-54	Iron	ug/L	1,880			NA	3,240			4.0	4,270	E	J	8.0	5,480			6.0	5,480
MW-54	Lead	ug/L			U	6.3	6.0			1.0	10			1.0	5.5			1.0	10
MW-54	Magnesium	ug/L	54,100			NA	47,900			5.0	51,900	E	J	3.0	52,000		J	3.0	54,100
MW-54	Manganese	ug/L	202			NA	130			1.0	163	E	J	1.0	256			1.0	256
MW-54	Mercury	ug/L		U	U	0.20			U	0.20		U	U	0.20		U	U	0.20	0.20
MW-54	Nickel	ug/L	66			NA	13	B		1.0	23	B		1.0	37	B		1.0	66
MW-54	Potassium	ug/L	4,540	BE	J	NA	2,340	BE	J	27	2,950	BE	J	18	2,750	BE	J	16	4,540
MW-54	Selenium	ug/L		B	U	2.7			U	2.0		U	U	2.0		U	U	2.0	2.7
MW-54	Silver	ug/L		U	U	1.0			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-54	Sodium	ug/L	20,600			NA	16,700			185	19,400	E	B	89	28,700	E	J	76	28,700
MW-54	Thallium	ug/L		U	U	2.0			U	3.0		U	U	2.0		U	U	2.0	3.0
MW-54	Vanadium	ug/L	1.9	B		NA	2.1	B		1.0	3.3	B		1.0	3.4	B		1.0	3.4
MW-54	Zinc	ug/L		B	U	14			U	31	128			1.0			U	54	128
MW-55	Aluminum	ug/L	15,950		J	NA		BEN	UJ	61	1,870			17	6,100	N	J	10	15,950
MW-55	Antimony	ug/L			U	2.2		B	U	1.9		U	U	2.0		U	U	1.0	2.2
MW-55	Arsenic	ug/L	13			NA	3.8	B		2.0	2.8	B		2.0	5.9	B		2.0	13
MW-55	Barium	ug/L	286			NA	115	B		1.0	178	B		1.0	219			1.0	286
MW-55	Beryllium	ug/L	2.7			NA			U	1.0		U	U	1.0	1.1	B		1.0	2.7
MW-55	Cadmium	ug/L			U	1.0			U	1.0		U	U	1.0		U	U	1.0	1.0
MW-55	Calcium	ug/L	79,100			NA	47,600			7.0	80,000	E	J	7.0	78,200		J	8.0	80,000
MW-55	Chromium (total)	ug/L	145			NA	7.8	B		1.0	17			1.0	61			1.0	145
MW-55	Cobalt	ug/L	11			NA	1.6	B		1.0	2.5	B		1.0	4.4	B		1.0	11
MW-55	Copper	ug/L	95			NA	105			1.0	11	B		1.0	54		J	1.0	105
MW-55	Cyanide (total)	ug/L			U	10			U	10		U	U	10		U	U	10	10
MW-55	Iron	ug/L	17,700			NA			U	198	1,580			8.0	5,850			6.0	17,700

**Appendix C**  
**Maximum Concentrations of Inorganics**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPI Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	Result	LQ	DQ	Detect Limit	
MW-55	Lead	ug/l.	46			NA	2.8	B		1.0	8.3			1.0	17			1.0	46
MW-55	Magnesium	ug/l.	38,150			NA	24,200			5.0	48,500			3.0	47,700		J	3.0	48,500
MW-55	Manganese	ug/l.	594			NA	100			1.0	284			1.0	388			1.0	594
MW-55	Mercury	ug/l.			U	0.22		U	U	0.20		U	U	0.20		U	U	0.20	0.22
MW-55	Nickel	ug/l.	110			NA	23	B		1.0	29	B		1.0	61			1.0	110
MW-55	Potassium	ug/l.	11,350		J	NA	7,180	E	J	27	6,650			18	6,660	E	J	16	11,350
MW-55	Selenium	ug/l.			U	4.7		U	U	2.0		U	U	2.0		U	U	2.0	4.7
MW-55	Silver	ug/l.			U	1.0		U	UJ	1.0		U	U	1.0		U	U	1.0	1.0
MW-55	Sodium	ug/l.	128,000			NA	109,000			185	47,400			89	49,500	E	J	76	128,000
MW-55	Thallium	ug/l.	2.1			NA		U	U	3.0		U	U	2.0		U	U	2.0	3.0
MW-55	Vanadium	ug/l.	16			NA		U	U	1.0	1.6	B		1.0	5.3	B		1.0	16
MW-55	Zinc	ug/l.	110			NA			U	22	31			1.0			U	77	110

American Chemical Services NPL Site  
Griffin, Indiana

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**Appendix C**  
**Maximum Concentrations of Natural Attenuation Study Analytes**  
**Baseline Groundwater Monitoring**  
**American Chemical Services NPL Site**  
**Griffith, Indiana**

Well	Analyte	Units	Event 1				Event 2				Event 3				Event 4				Highest Detection
			Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	Result	I.Q.	DQ	Detect Limit	
MW-45	Organic Carbon (total)	ug/l.	NA				NA				6,150			1,000	5,090			1,000	6,150
MW-45	ortho-phosphate	ug/l.	NA				NA					U	U	20		U	U	20	20
MW-45	Sulfate	ug/l.	NA				NA				9,120			2,000		U	U	2,000	9,120
MW-48	Ammonia	ug/l.	NA				NA						J	100	7,410			100	10,000
MW-48	Biological Oxygen Demand	ug/l.	NA				NA				11,900			2,000	16,500			2,000	16,500
MW-48	Nitrate	ug/l.	NA				NA				NA				23			20	23
MW-48	Nitrate/Nitrite	ug/l.	NA				NA					U	U	20	NA				20
MW-48	Nitrite	ug/l.	NA				NA				NA					U	U	20	20
MW-48	Nitrogen (Kjeldahl)	ug/l.	NA				NA				8,850		J	100	7,620			100	8,850
MW-48	Organic Carbon (total)	ug/l.	NA				NA				16,300			1,000	12,000			1,000	16,300
MW-48	ortho-phosphate	ug/l.	NA				NA					U	U	20		U	U	20	20
MW-48	Sulfate	ug/l.	NA				NA					U	U	2,000		U	U	2,000	2,000